KENWOOD

COMPONENT AUDIO SYSTEM

M-49/M-49M
M-29/M-29M

INSTRUCTION MANUAL

KENWOOD CORPORATION

This instruction manual is used for four models. Model availability and features (functions) may differ depending on the country and sales area.

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on the product.

Model_____ Serial Number_____

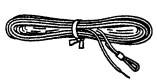
Unpacking

Unpack the unit carefully and make sure that all accessories are put aside so they will not be lost. Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

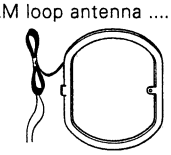
We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

Accessories

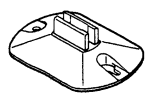
FM indoor antenna .. (1)



AM loop antenna ..... (1)

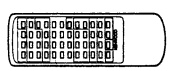


Loop antenna stand .. (1)

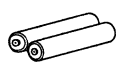


Antenna adaptor ..... (1)
(For U.K. and Europe)

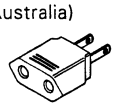
Remote control unit .. (1)



Batteries (R6/AA) ..... (2)



AC plug adaptor ..... (1)
(Except for the U.S.A., Canada, Europe, U.K. and Australia)



For the unit with a European AC plug in areas other than Europe.

COMPACT disc DIGITAL AUDIO

NOTE:(For M-49M and M-29M)
Do not transport the system with a CD left in it.

B60-2238-20 (SI) (T, M, X, Y, I) AP

Before applying power

⚠ *Caution : Read this page carefully to ensure safe operation.*

Units are designed for operation as follows.

U.S.A. and Canada	*AC 120 V only*
Australia	*AC 240 V only*
Europe and U.K.	*AC 230 V only*
**Other countries*	*AC 110-120 / 220 / 230-240 V switchable*

For the United Kingdom

Factory fitted moulded mains plug

1. The mains plug contains a fuse. For replacement, use only a 13-Amp ASTA-approved (BS1362) fuse.
2. The fuse cover must be refitted when replacing the fuse in the moulded plug.
3. Do not cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or adapter, or consult your dealer.
   If nonetheless the mains plug is cut off, remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

Blue :Neutral
Brown:Live

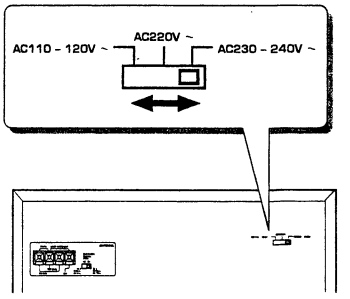
Do not connect those leads to the earth terminal of a three-pin plug.

**AC voltage selection*

The AC voltage selector switch on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

AC voltage selector switch

Move switch lever to match your line voltage with a small screwdriver or other pointed tool.



Note:
Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.

Safety precautions

WARNING : TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
	THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.
	THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

The marking of products using lasers (Except for some areas)

CLASS 1 LASER PRODUCT

The label is attached to the rear panel and says that the component uses laser beams that have been classified as Class 1. It means that the unit is utilizing laser beams that are of a weaker class. There is no danger of hazardous radiation outside the unit.

Special features

Dynamic rotary volume control –21 –23

When adjusting the volume, the amount of volume variation is variable according to the speed of rotating the VOLUME CONTROL. Rotating the control slowly decreases the variable effect so a finer adjustment is possible.

Convenient DPSS –38

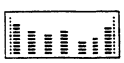
The DPSS (Direct Program Search System) allows you to play a cassette tape with a variety of playback functions simlar to a CD.

- Playing tunes by skipping some.
- Playing a single tune repeatedly.

Simplified CD recording –46 –50

Various CD editing & recording features are available for selection according to the tape you require.

- Fade edit recording: Recording CD tracks sequentially from No. 1.
- Program edit recording: Recording desired CD tracks in desired order. (M-49/M-29 only)
- Timed edit recording: Recording CD tracks within the specified tape length so that no track is interrupted in the middle.



Versatile tone and sound field adjustment –55

The tone can be selected according to the genre of the music played:
POP, ROCK, JAZZ, CLASSIC, MOVIE.
The sound field can also be selected as desired:
ARENA, JAZZ CLUB, STADIUM.

Live, being-there sounds of presence effects –58

DOLBY SURROUND playback is a matter of course. In addition, sound can be reproduced in KENWOOD original sound fields and the depth of sound can be adjusted as desired. You can enjoy music in the sound field you like. (M-49/M-49M only)

Convenient timer functions –62

In addition to the possibility of storing up to 2 timer programs in memory, the following functions are available.

- AI timer: When the power is turned ON by the timer, the sound level increases gradually.
- Sleep timer: Useful when you want to go asleep while listening to music.

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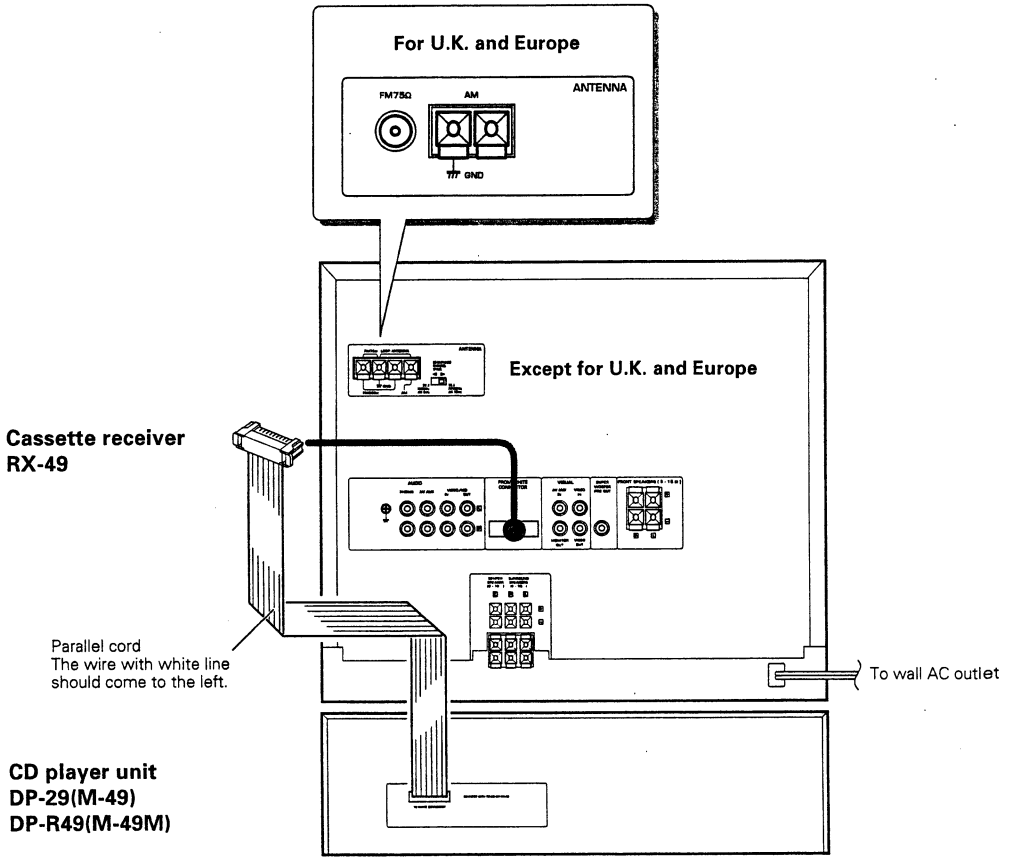
System connections (M-49/M-49M)

Do not plug the power cord into the power outlet until all of the required connections have been made.

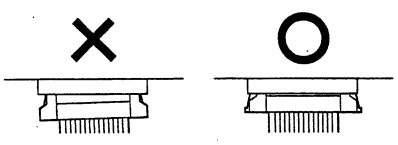
- When arranging the system units in a vertical, stacked configuration, observe the stacking order indicated in the system connection diagram below.
- In the case an associated system component being connected, also read the instruction manual of the component.
- Align the front panels of the unit flush.

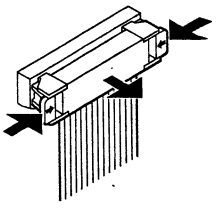
Malfunction of microcomputer

If operation is not possible or erroneous display appears even though all connections have been made properly, reset the microcomputer referring to "In case of difficulty". -67



Connection of parallel cord





- When connecting the parallel cord, insert the plug straight into the connector until it clicks to lock them securely.
- When disconnecting the parallel cord, push in the two sides of the plug and pull it straight out.

Notes

1. Be sure to insert all connection cords securely. If their connections are imperfect, the sound may not produced or noise may interfere.
2. Before plugging or unplugging a connection cord, be sure to unplug the power cord from the wall AC outlet. If connection cords are plugged or unplugged with the power cord left plugged in, malfunction or damage may result.

System connections (M-29/M-29M)

Do not plug the power cord into the power outlet until all of the required connections have been made.

- When arranging the system units in a vertical, stacked configuration, observe the stacking order indicated in the system connection diagram below.
- In the case an associated system component being connected, also read the instruction manual of the component.
- Align the front panels of the unit flush.

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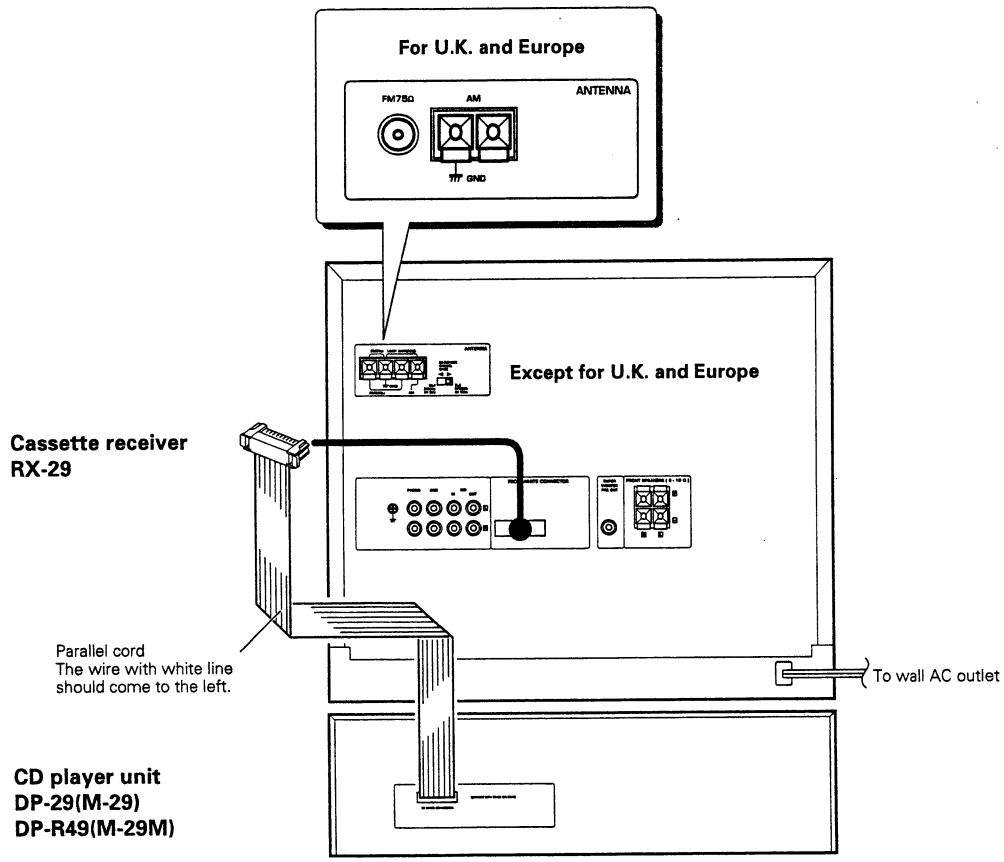
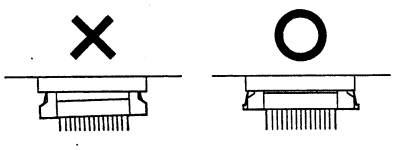
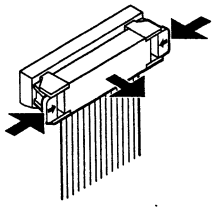


Connection of parallel cord





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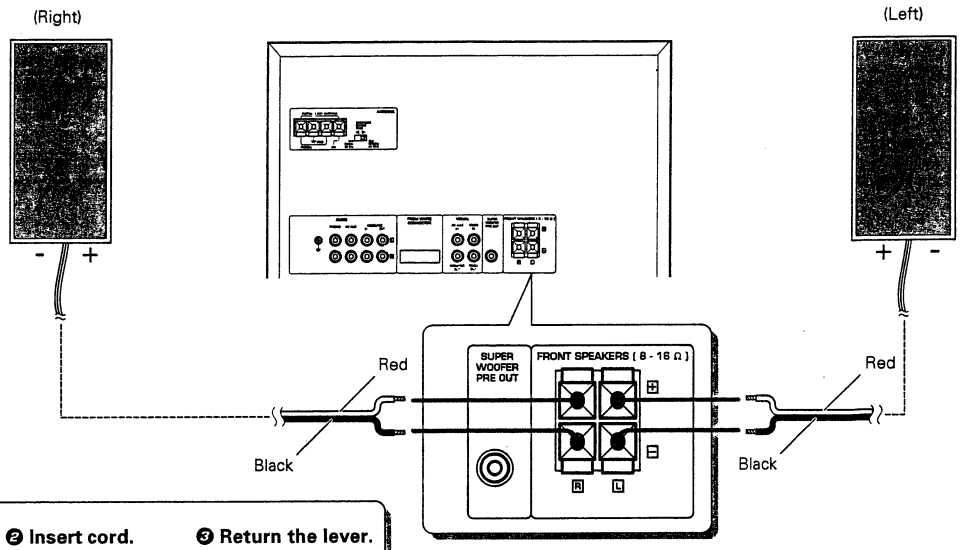
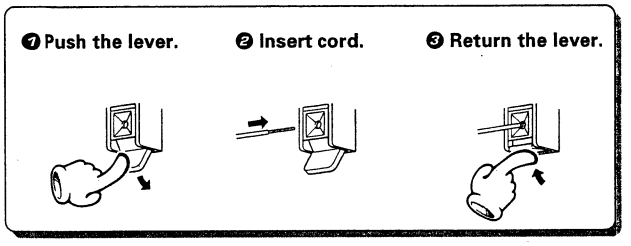
Connection of the speakers (M-49/M-49M)

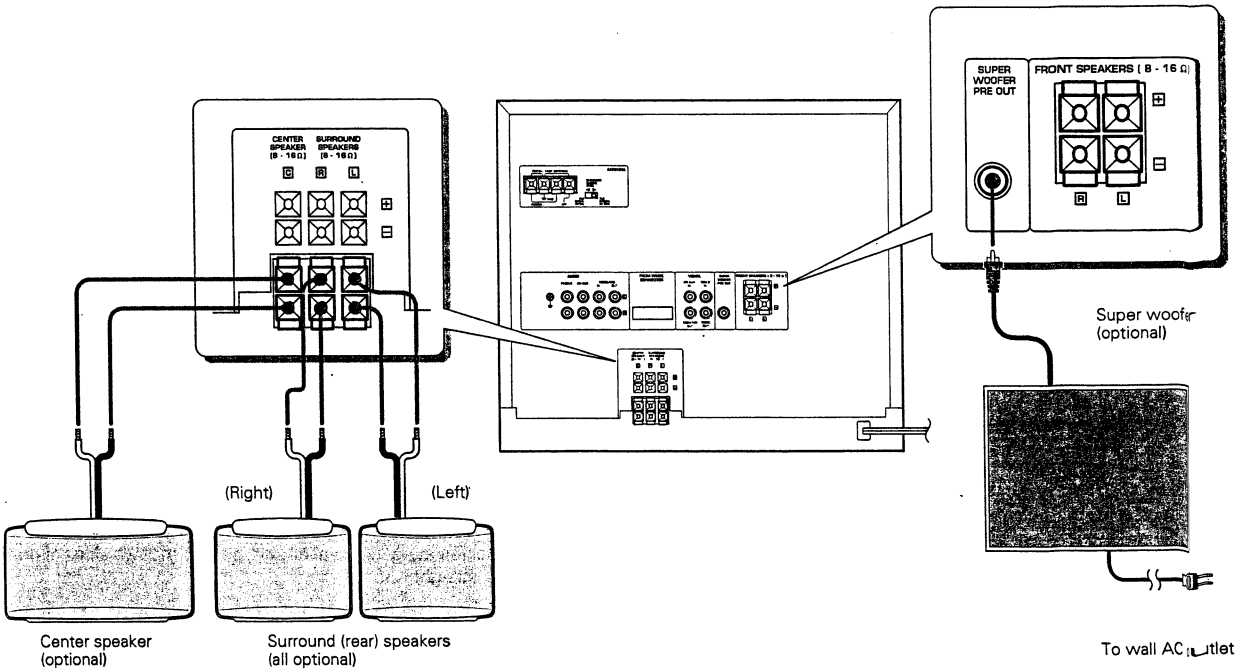




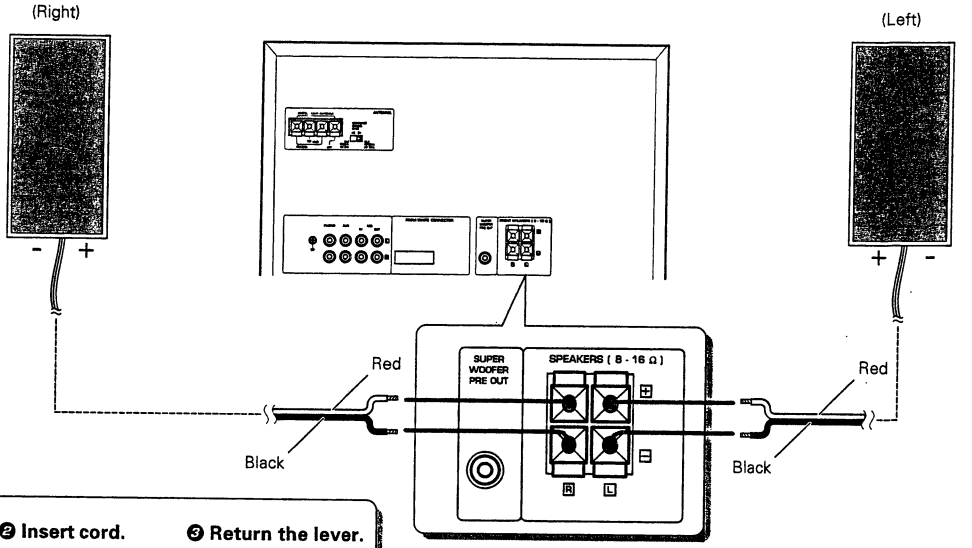
- Never short-circuit the + and – speaker cords.
- If the left and right speaker connections or the + and – polarity are inverted, the sound will be unnatural with unclear positioning of musical instruments, etc. Be sure to connect them without mistake.
- Be sure to use speakers with an impedance of 8 to 16 ohms.

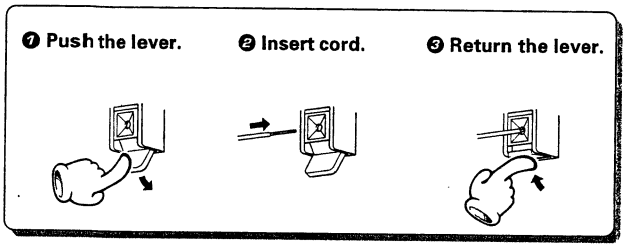
Connection of optional speakers (M-49/M-49M)

- Connection cords are not supplied with this system.
- When using optional speakers, be sure to read their instruction manuals carefully.



Connection of the speakers (M-29/M-29M)





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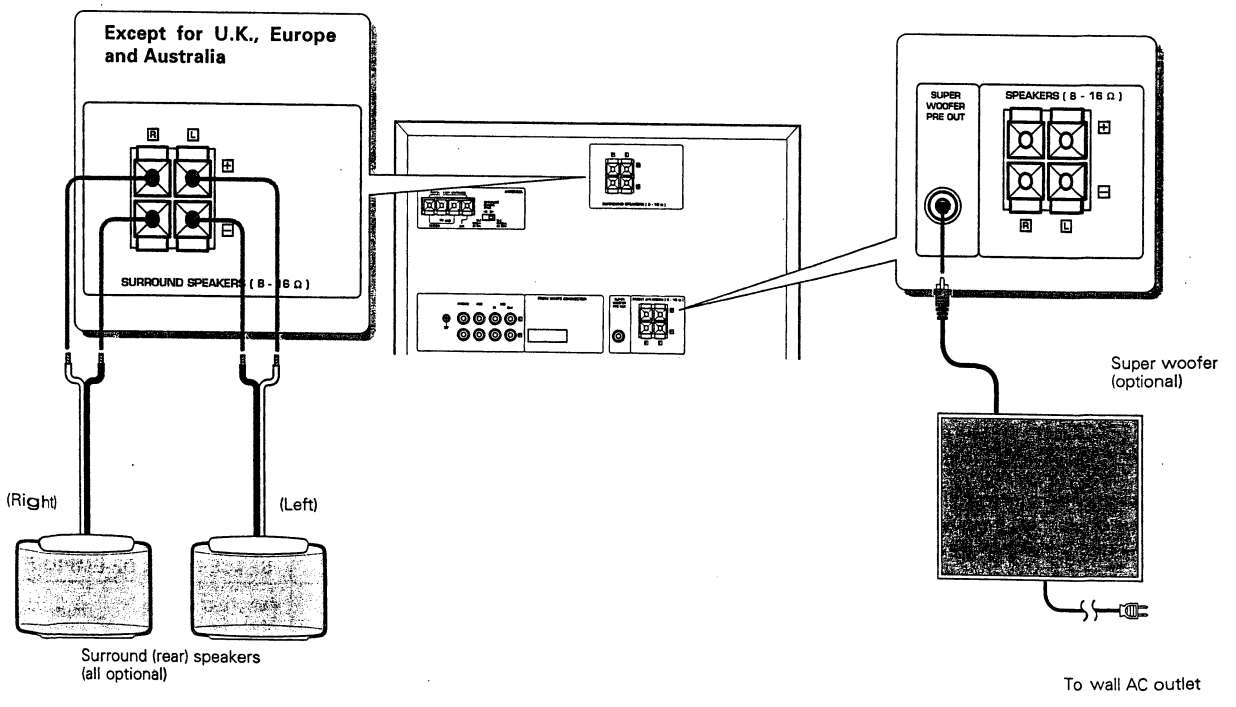
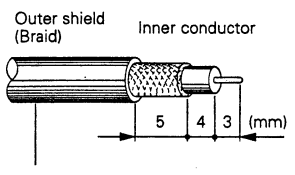


Connection of antenna adapter (U.K., and Europe only)

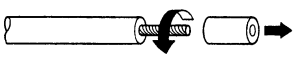
❶ Strip the cable coating.

When coaxial cable is used



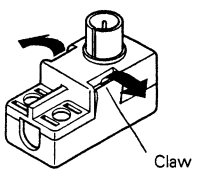
RG-6 (5C-2V) or RG-59 (3C-2V)

When the provided simplified antenna is used



Remove the vinyl coating and twist conductors.

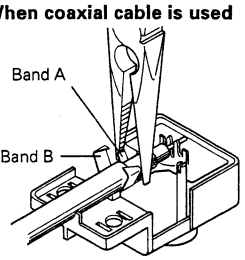
❷ Open the antenna adaptor.



Open the claws with the fingers to release the lock and pull out the cover.

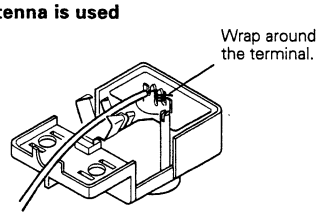
❸ Attach the cable and close the cover.

When coaxial cable is used



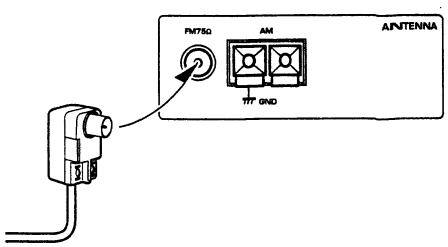
Insert the cable into the slit on the clip. Fasten bands A and B using a pair of pliers.

When the provided simplified antenna is used



Insert the antenna cord tip into the slit on the hardware and wrap the cord around it.

❹ Connect the adaptor to the antenna terminal.

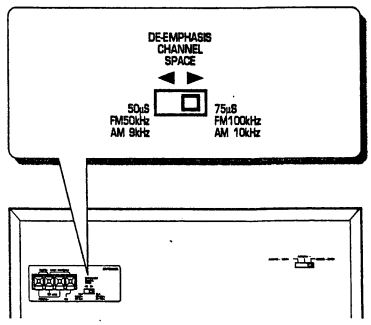


FM DE-EMPHASIS/CHANNEL SPACE switch

(Except for U.S.A., Canada, U.K., Europe and Australia)

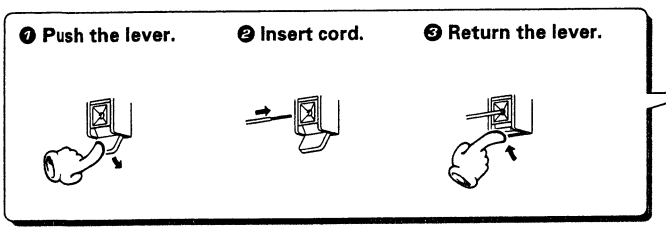
The FM DE-EMPHASIS/CHANNEL SPACE switch on the rear panel is set to the correct setting that prevails in the area to which the unit is shipped. However, if the FM DE-EMPHASIS/CHANNEL SPACE setting is not matched to the area where the unit is to be used; for instance, when you move from area 1 to area 2 or vice versa, desired reception of AM/FM broadcasts is not expected. In this case, change the FM DE-EMPHASIS/CHANNEL SPACE setting in accordance with the area corresponding to the table. The FM DE-EMPHASIS is switched over at the same time.

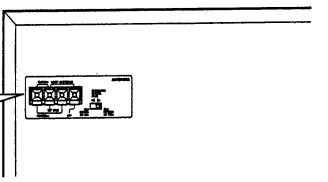
- When changing the setting of the FM DE-EMPHASIS/CHANNEL SPACE switch, first disconnect the power cord, then reset the channel space switch, connect the power cord again, and turn the power on.



	Area	CHANNEL SPACE freq.	FM DE-EMPHASIS
1	U.S.A., Canada, and South American countries	FM: 100kHz AM: 10kHz	75µs
2	Other countries	FM: 50kHz AM: 9kHz	50µs

Connection method





Cassette receiver RX-49/RX-29

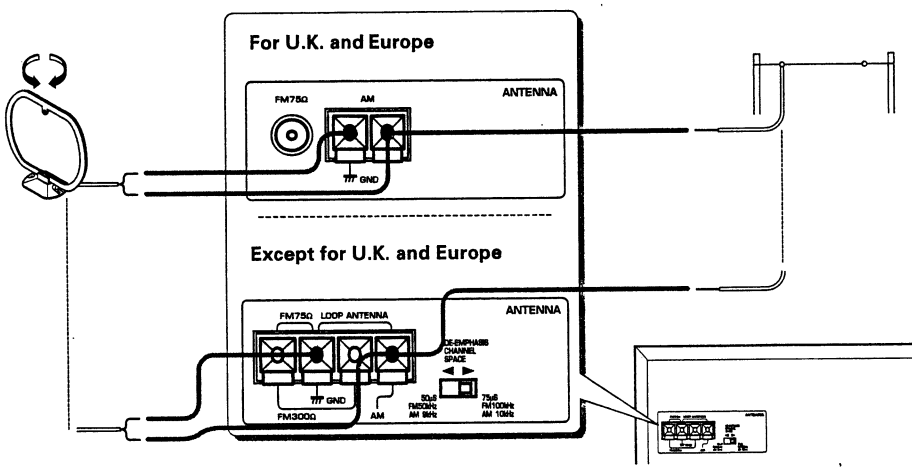
Connection of AM antenna

Connection of AM loop antenna

The provided antenna is for indoor use. Place it in a position as far as possible from this system, TV, speaker cords and power cord and set to the orientation which provides the best reception condition.

Connection of AM outdoor antenna

If the reception condition is poor with the loop antenna alone, connect a vinyl coated wire of more than 6 m (20 ft) and extend it outdoors while leaving the loop antenna connected.



Cassette receiver RX-49/RX-29

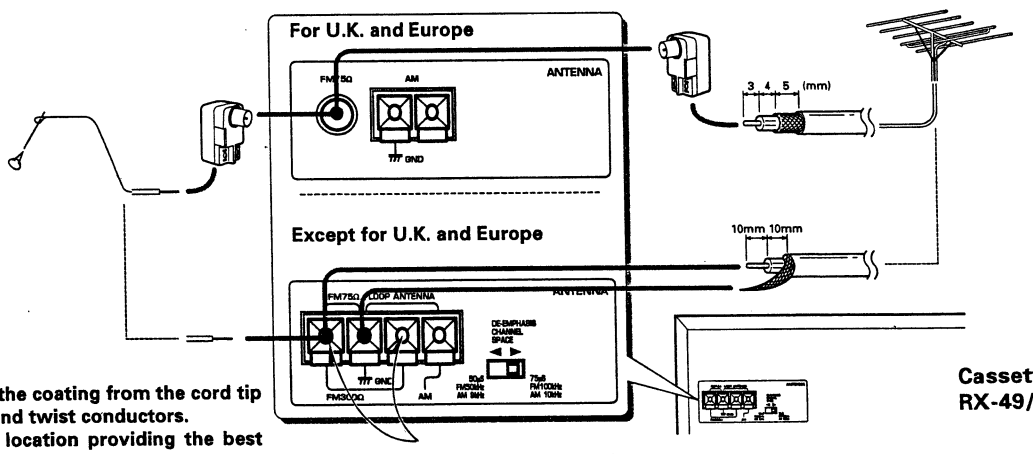
Connection of FM antenna

Connection of FM simplified antenna

The accessory antenna is for temporary indoor use only. For stable signal reception we recommend using an outdoor antenna. Remove the indoor antenna if you connect one outdoors.

Connection of FM outdoor antenna

Lead the antenna wire indoors using a 75 Ω coaxial cable and connect it to the FM 75 Ω connector.



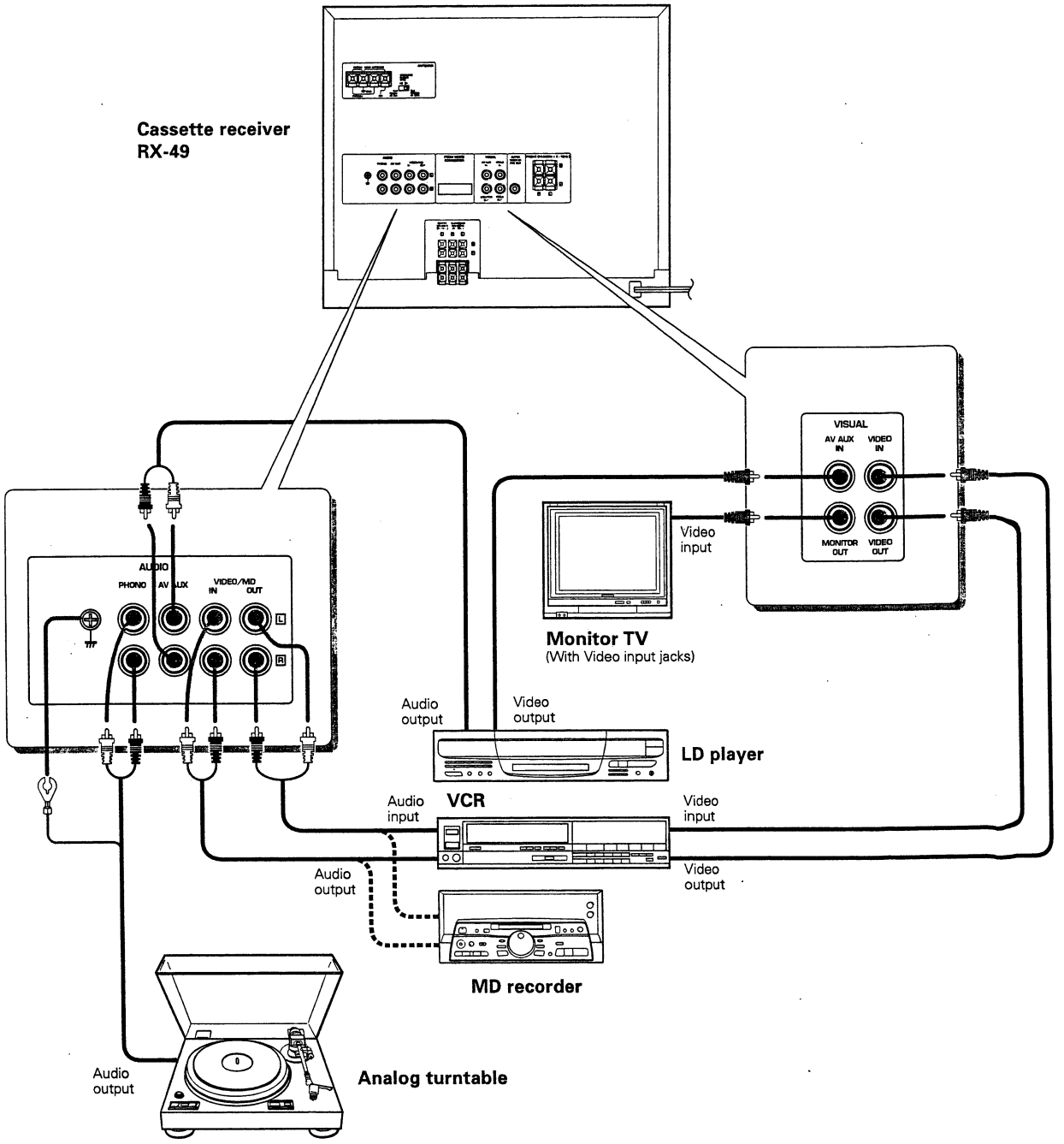
Cassette receiver RX-49/RX-29

❶ Remove the coating from the cord tip section and twist conductors.
❷ Find the location providing the best receiving condition.
❸ Fix the antenna there.

When a T-shaped, FM indoor antenna (300 Ω) which is marketed in audio stores is used, connect it to these terminals. (In this case, disconnect the provided FM simplified antenna.)

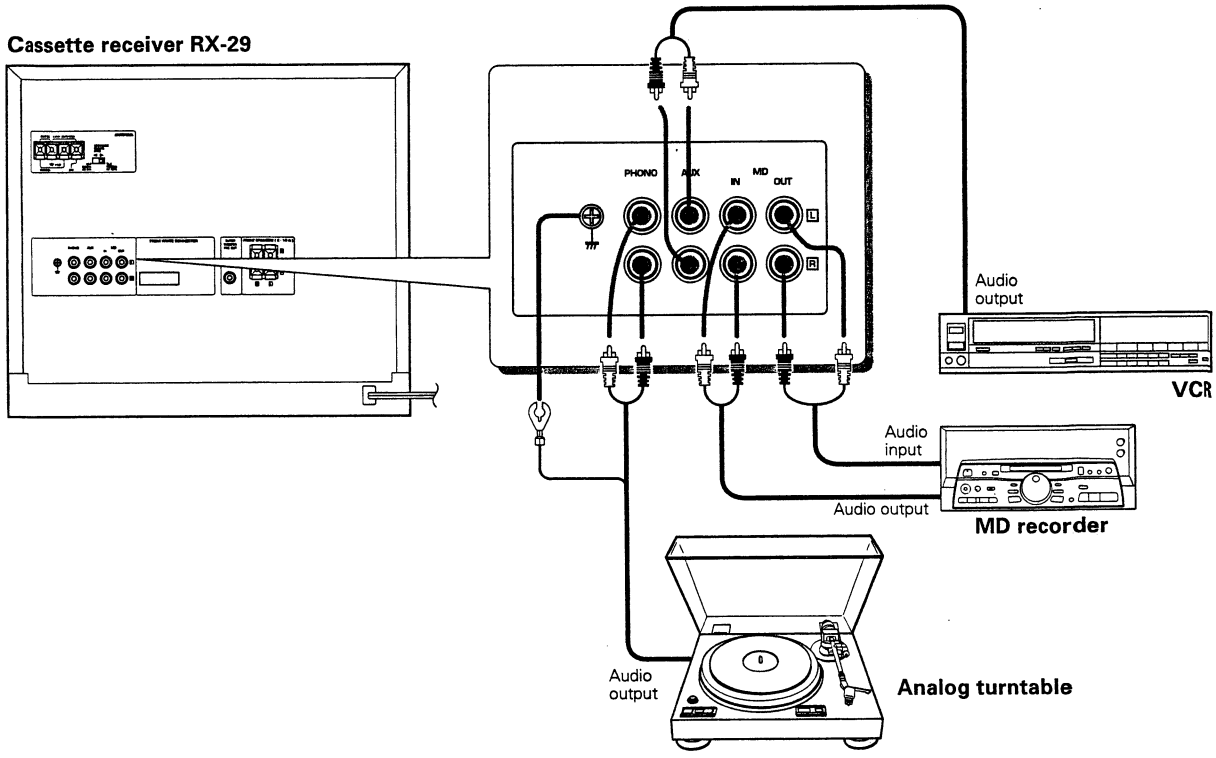
Connection of Audio -Visual components (optional) (M-49/M-49M)

- Connection cords are not supplied with this system.
- Any of the following components can be connected in place of the LD player shown below.
  - DBS tuner
  - Video camera
  - Video recorder
- A DAT recorder can also be connected in place of the MD (Mini Disc) recorder.



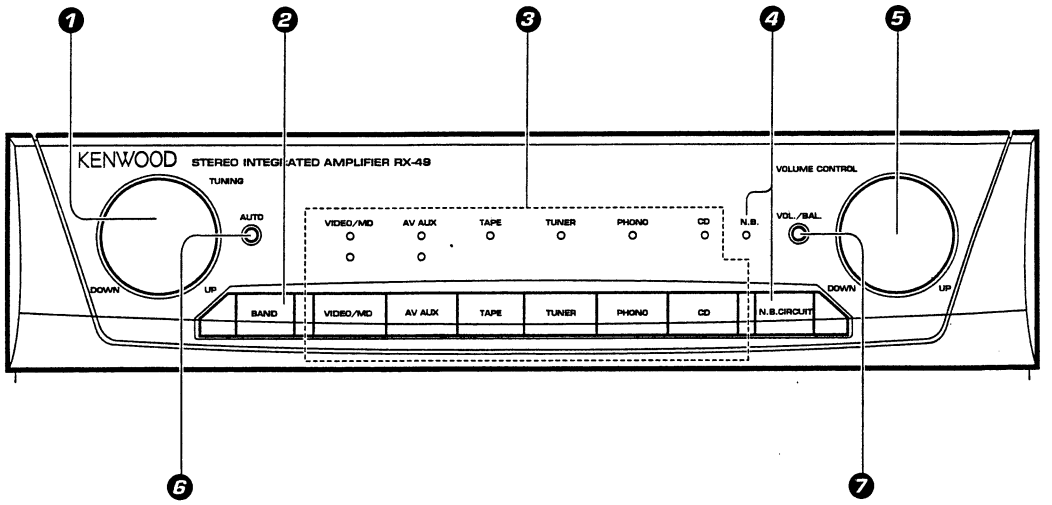
Connection of Audio -Visual components (optional) (M-29/M-29M)

- Connection cords are not supplied with this system.
- Any of the following components can be connected in place of the MD (Mini Disc) recorder shown below.
  - DBS tuner
  - Video camera
  - Video recorder
  - DAT recorder



Controls and indicators

Amplifier unit (M-49/M-49M)



❶ TUNING knob →40
Turn to select the station to be received.

❷ BAND key →40
Press to select the required frequency band.

❸ Input selector keys / indicators →24
Press to select the component to be played.

Indicators →21
Red : Audio system
Green : Video system

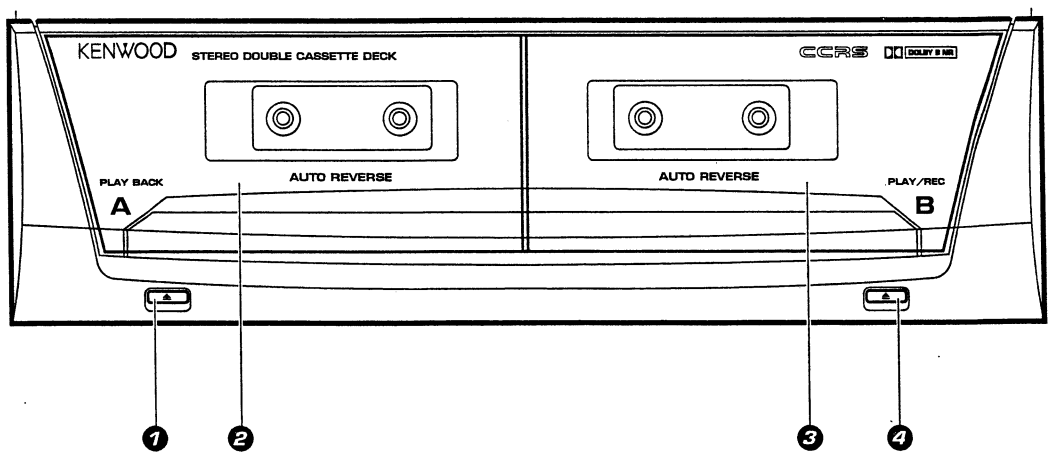
❹ N.B.CIRCUIT key →20
Press to ON to activate automatic compensation of bass tone.

❺ VOLUME CONTROL knob →21

❻ AUTO key →40
Press to receive stations in auto tuning mode.

❼ VOL./BAL. key →21
Press to adjust the volume balance between the left and right speakers.

Cassette deck unit



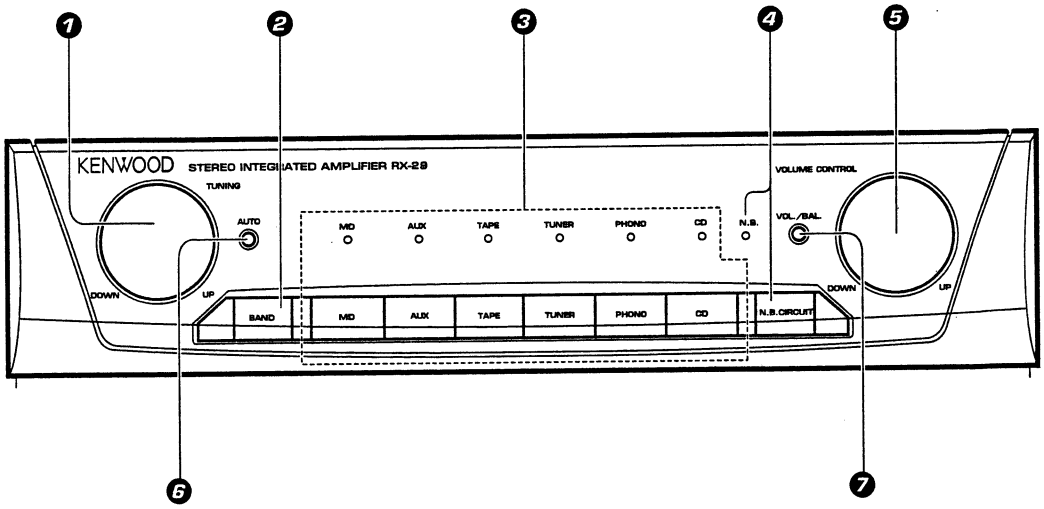
❶ Deck A eject key →36

❷ Deck A cassette holder →36

❸ Deck B cassette holder →36

❹ Deck B eject key →36

Amplifier unit (M-29/M-29M)



❶ TUNING knob →40
Turn to select the station to be received.

❷ BAND key →40
Press to select the required frequency band.

❸ Input selector keys / indicators →24
Press to select the component to be played.

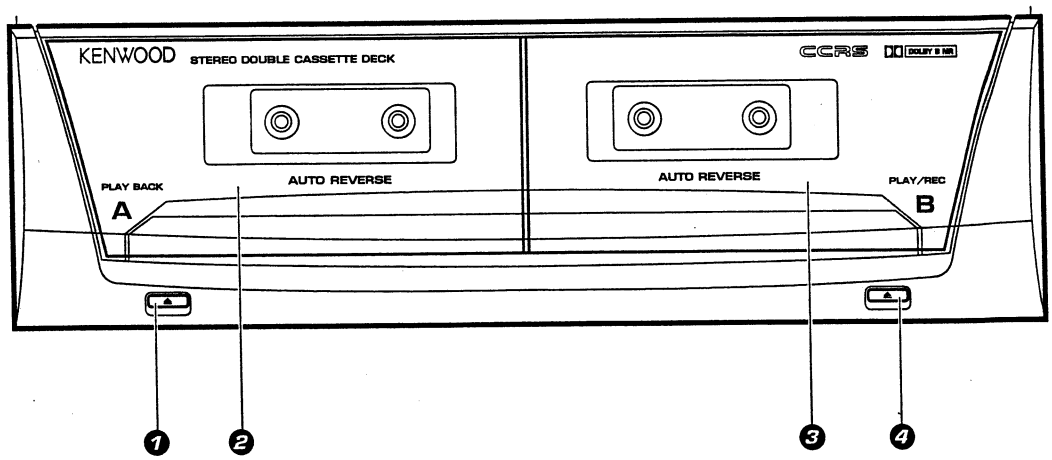
❹ N.B.CIRCUIT key →22
Press to ON to activate automatic compensation of bass tone.

❺ VOLUME CONTROL knob →23

❻ AUTO key →40
Press to receive stations in auto tuning mode.

❼ VOL./BAL. key →23
Press to adjust the volume balance between the left and right speakers.

Cassette deck unit



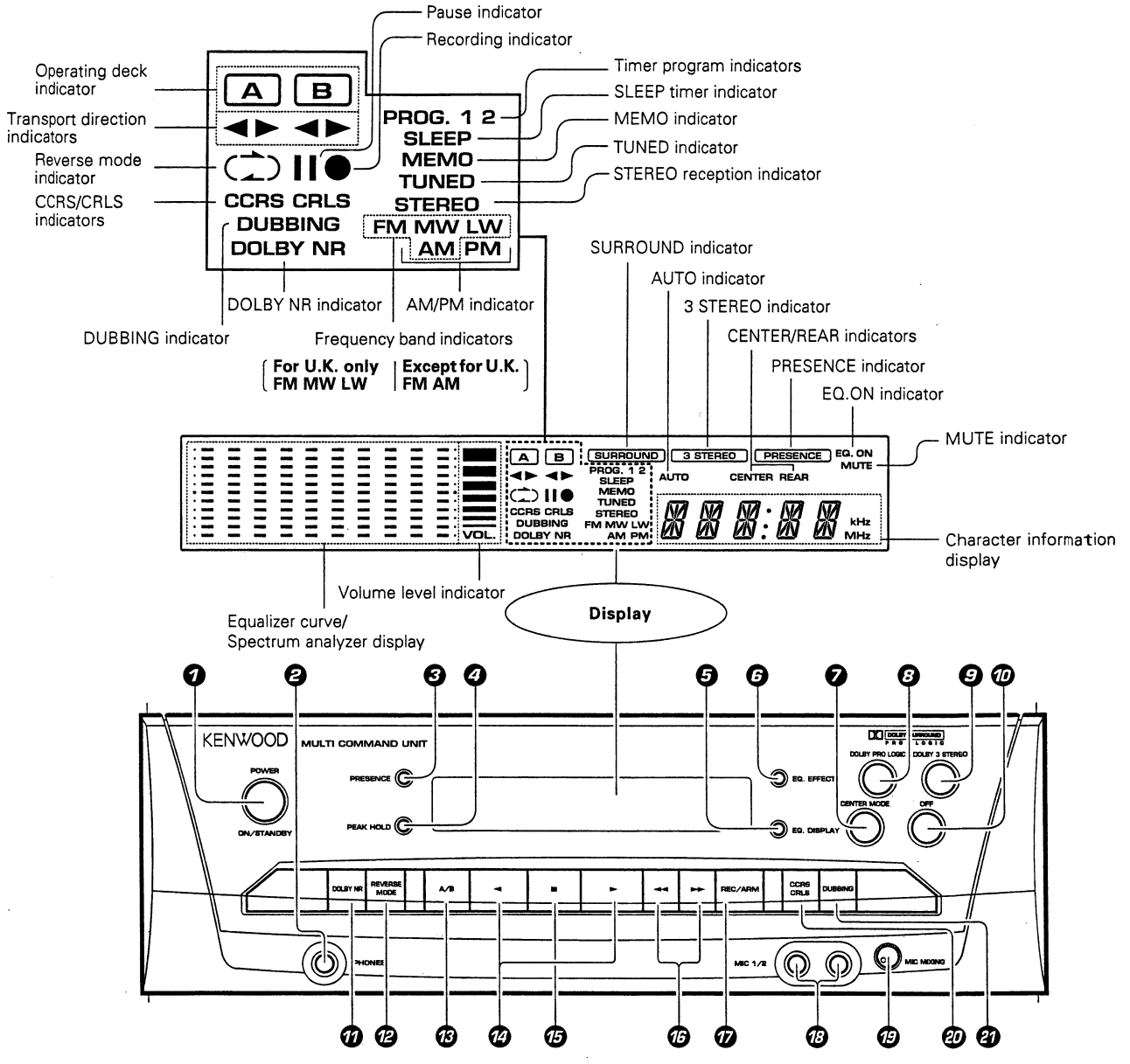
❶ Deck A eject key →36

❷ Deck A cassette holder →36

❸ Deck B cassette holder →36

❹ Deck B eject key →36

Multi command unit (M-49/M-49M)



❶ POWER key – 20
Press to turn the POWER ON/OFF.

❷ PHONES jack – 20
Connect headphones for listening through them.

❸ PRESENCE key – 55
Press for presence play.

❹ PEAK HOLD key – 54

❺ EQ.DISPLAY key – 54

❻ EQ.EFFECT key – 55

❼ CENTER MODE key – 59
Used in adjustment of or playback in the Dolby 3 Stereo or Dolby Pro Logic mode.

❽ DOLBY PRO LOGIC key – 60
Used in adjustment of or playback in the Dolby Pro Logic mode.

❾ DOLBY 3 STEREO key – 59
Used in adjustment of or playback in the Dolby 3 Stereo mode.

❿ OFF key – 59
Press to switch the surround and presence modes OFF.

⓫ DOLBY NR key – 36

⓬ REVERSE MODE key – 36
Press to switch over the play modes.

⓭ A/B Selector key – 36
Press to select the playback deck.

⓮ Play keys – 36

⓯ Stop key – 36

⓰ Fast Forward/Rewind keys – 38

⓱ REC/ARM key – 43

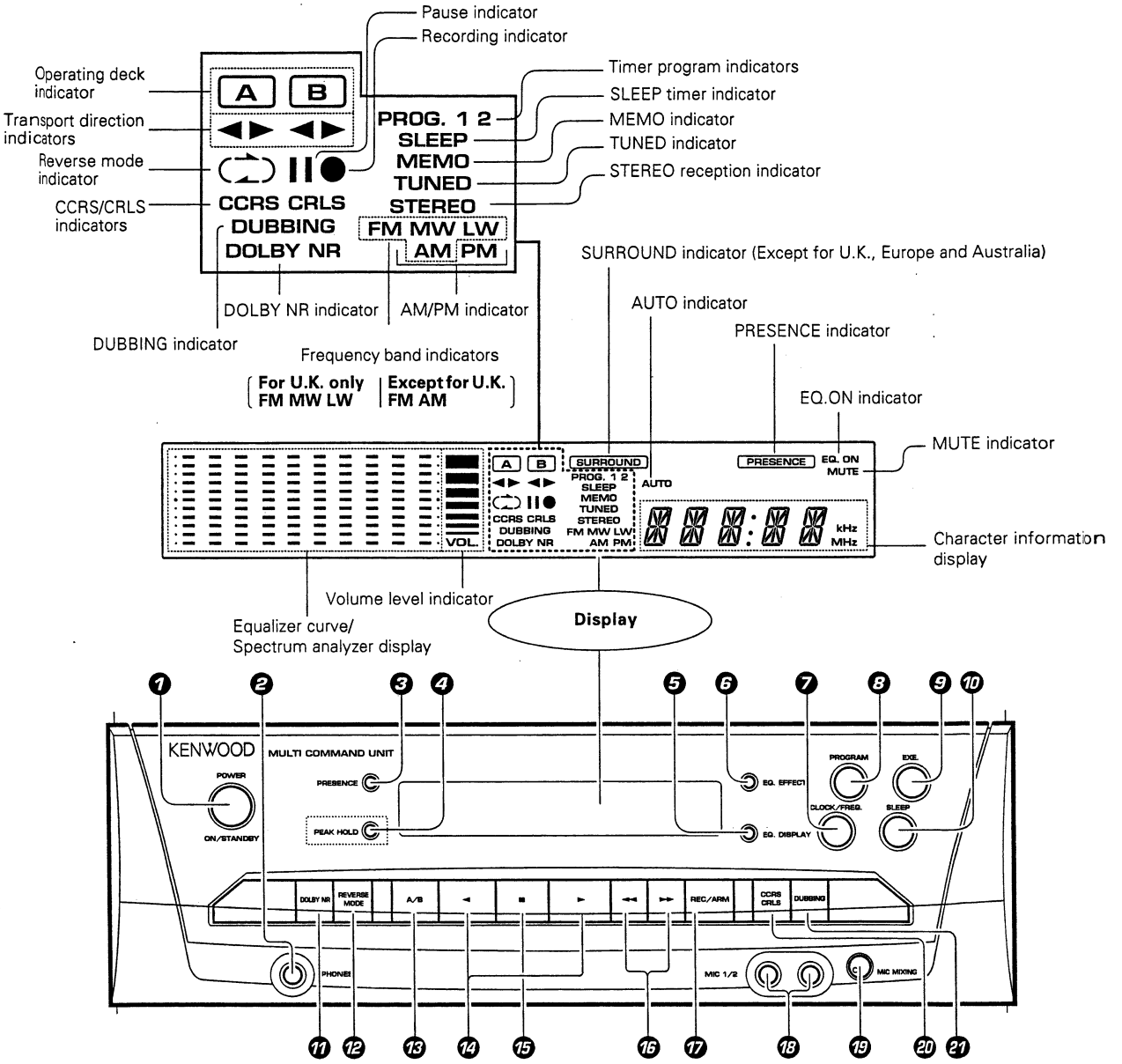
⓲ MIC 1/2 jacks – 56 – 57

⓳ MIC MIXING control – 56 – 57
Turn to adjust the microphone input volume.

⓴ CCRS/CRLS key – 43 – 46 – 50

㉑ DUBBING key – 45
Press for dubbing between tapes.

Multi command unit (M-29/M-29M)



❶ POWER key – 22
Press to turn the POWER ON/OFF.

❷ PHONES jack – 22
Connect headphones for listening through them.

❸ PRESENCE key – 55
Press for presence play.

❹ PEAK HOLD key – 23 – 54
For U.K. Europe and Australia
SURROUND key – 23
For other countries

❺ EQ. DISPLAY key – 54

❻ EQ. EFFECT key – 55

❼ CLOCK/FREQ. key – 40

❽ PROGRAM key – 62

❾ EXE. key – 63

❿ SLEEP key – 64

⓫ DOLBY NR key – 36

⓬ REVERSE MODE key – 36
Press to switch over the play modes.

⓭ A/B Selector key – 36
Press to select the playback deck.

⓮ Play keys – 36

⓯ Stop key – 36

⓰ Fast Forward/Rewind keys – 36

⓱ REC/ARM key – 49

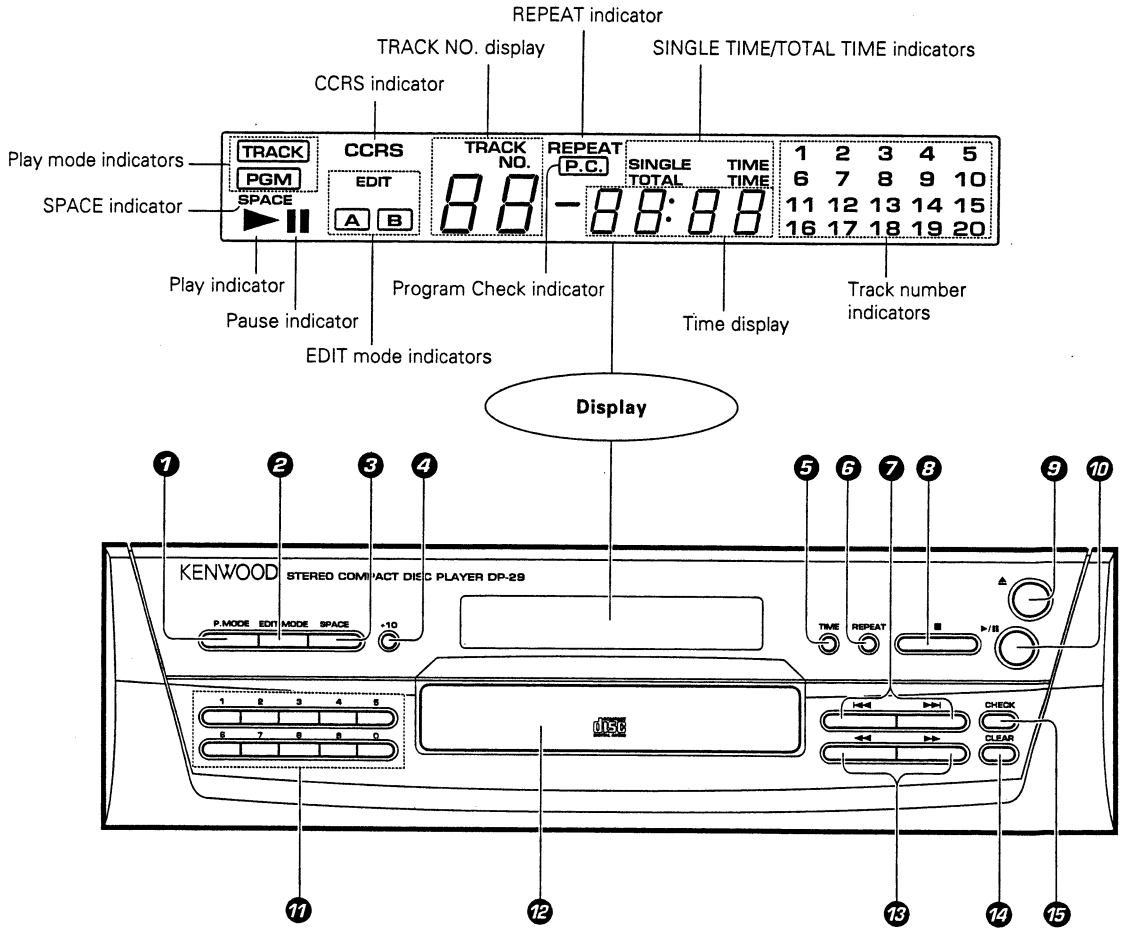
⓲ MIC 1/2 jacks – 56 – 57

⓳ MIC MIXING control – 56 – 57
Turn to adjust the microphone input volume.

⓴ CCRS/CRLS key – 43 – 46 – 50

㉑ DUBBING key – 46
Press for dubbing between tapes.

CD player unit (M-49/M-29)



❶ **P.MODE key** →26
Press to switch between the TRACK mode and PGM mode.

❷ **EDIT MODE key** →47
Press to select the edit recording mode.

❸ **SPACE key** →27
Press in PGM mode to create a non-recorded space of a few seconds between recorded tracks automatically.

❹ **+10 key** →25

❺ **TIME key** →28
Press to switch the time display mode.

❻ **REPEAT key** →28
Press for repeated playback.

❼ **Skip keys** →25
Press to skip to the beginning of another track.

❽ **Stop key** →24

❾ **Open/Close key** →24

❿ **Play/pause key** →24

⓫ **Numeric keys** →25

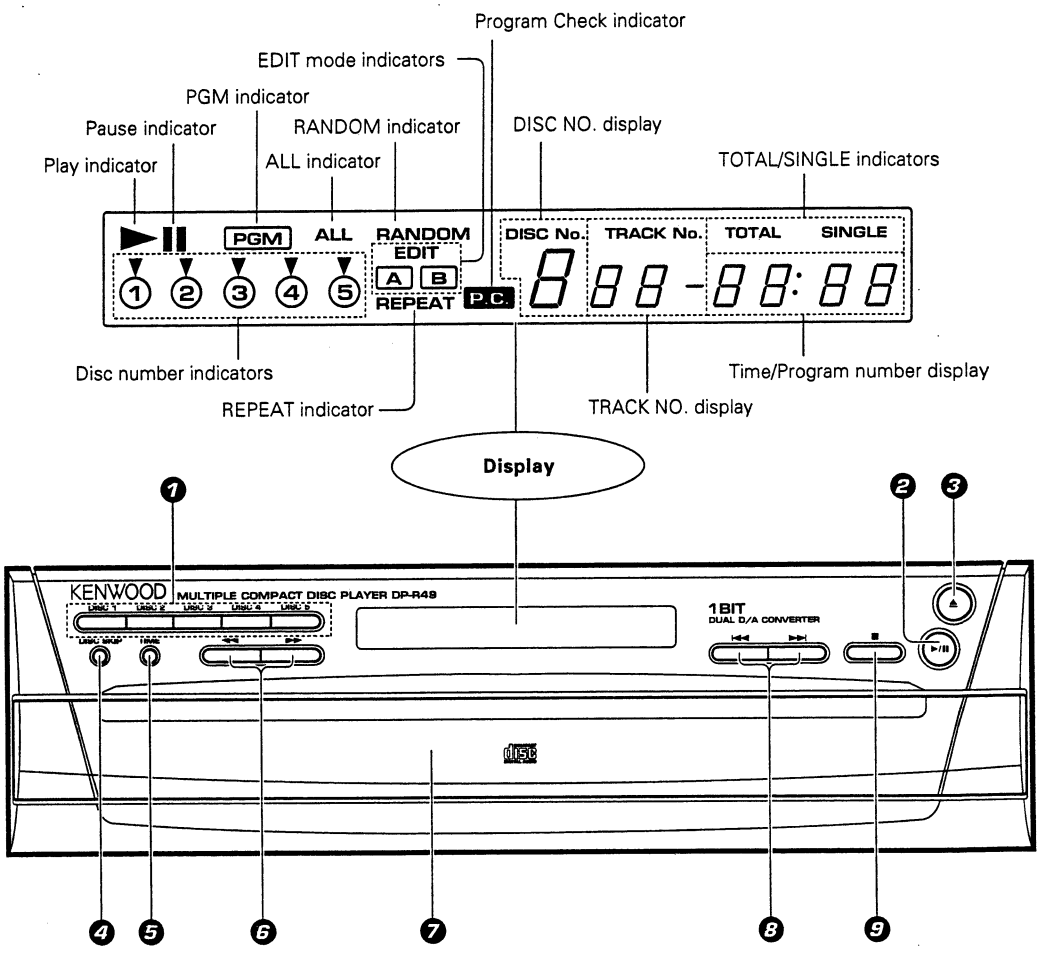
⓬ **Disc tray** →24

⓭ **Search keys** →25

⓮ **CLEAR key** →27

⓯ **CHECK key** →27

CD player unit (M-49M/M-29M)



❶ Disc selector keys (DISC 1~DISC 5) →29
❷ Play/pause key →29
❸ Open/Close key →29
❹ DISC SKIP key →29
❺ TIME key →33

❻ Search keys →30
❼ Disc tray →29
❽ Skip keys →30
Press to skip to the beginning of another track.
❾ Stop key →29

Operation of remote control unit

Tuner operation keys
BAND key, P.CALL keys

Cassette deck operation keys
To operate deck A, set the A/B switch to A. (The ● key is invalidated.)
To operate deck B, set the A/B switch to B.

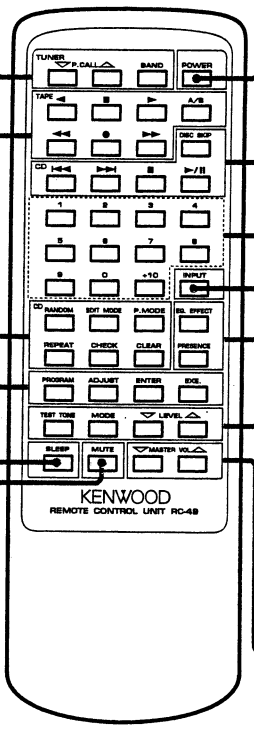
CD player operation keys
*RANDOM key, EDIT MODE key, P.MODE key, REPEAT key, CHECK key, CLEAR key

* The RANDOM key is for use with the M-49M/M-29M system.

Timer operation keys
PROGRAM key, ADJUST key, ENTER key, EXE. key

SLEEP key

MUTE key
Press to mute the sound temporarily.



POWER key

CD player basic operation keys
*DISC SKIP key, ⏮ and ⏭ keys, ■ key, ▶/⏸ key

* The DISC SKIP key is for use with the M-49M/M-29M system.

Numeric keys
Function as the numeric keys of the CD player when the CD input is selected.
Function as the numeric keys of the tuner when the TUNER input is selected.

Input selector key
INPUT key: Press to select the component to be played.

Graphic equalizer operation keys
EQ.EFFECT: Press to select a graphic equalizer effect.
PRESENCE: Press to select a presence effect.

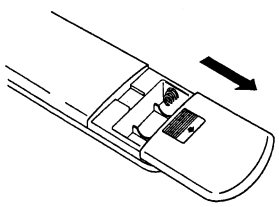
Surround effect keys (M-49/M-49M)
TEST TONE key, MODE key, LEVEL key

VOLUME CONTROL keys
Press to adjust the volume.

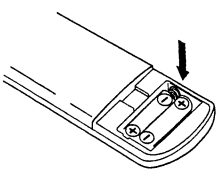
Model: RC-49 (M-49/M-49M)
: RC-29 (M-29/M-29M)
Infrared ray system

Loading batteries

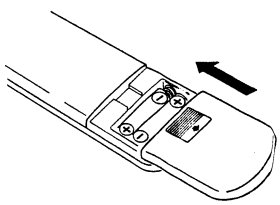
❶ Remove the cover.



❷ Insert batteries.



❸ Close the cover.

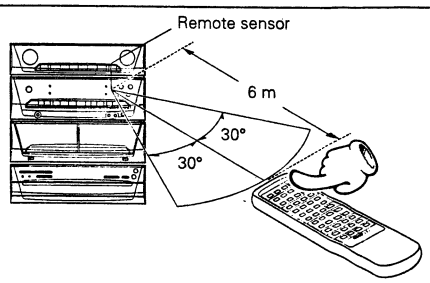


● Insert two R6 ("AA"-size) batteries following the polarity indications.

Operation

After plugging in the power cord, press the POWER key of the remote control unit to turn the power of the system ON. When the power is turned ON, press the key of the function to be operated.

● When pressing more than one remote control key successively, press the keys securely by leaving an interval of 1 second or more between keys.



Operating range (approx.)

Notes

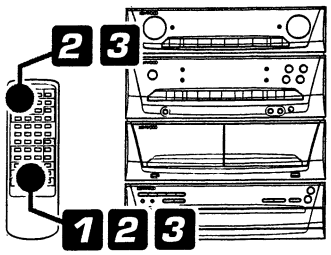
1. The provided batteries are intended for use in operation checking, and their service life may be short.
2. When the remote controllable distance becomes short, replace both of the batteries with new ones.
3. If direct sunlight or the light of a high-frequency fluorescent lamp (inverter type, etc.) is incident to the remote sensor, malfunction may occur. In such a case, change the installation position to avoid malfunction.

Clock adjustment

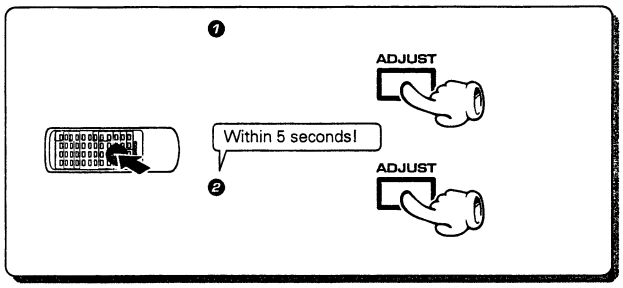
This unit incorporates a clock function. Be sure to adjust the correct time before using the timer function.

Note

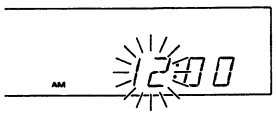
The time display blinks after a power failure or when the power cord has been unplugged from the AC outlet and plugged in again. In such a case, adjust the clock again.



1 Activate the clock adjustment mode.

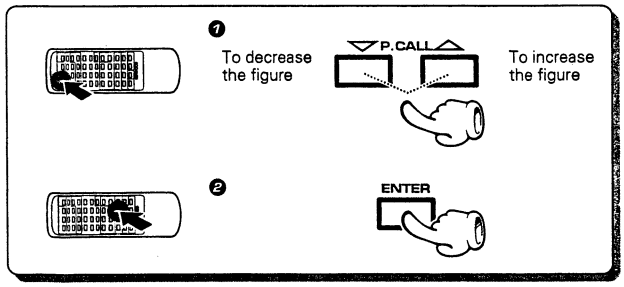


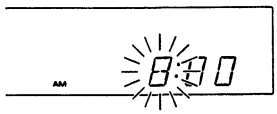
Example: Adjustment to 8:45



- The time display starts to blink.
- The time can be set even when the power is OFF. In this case the procedure starts from Steps 1 - ❷.

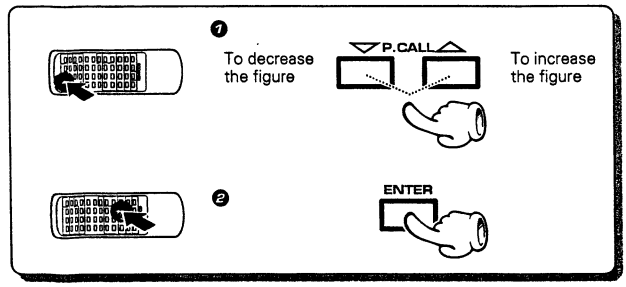
2 Enter the hour.

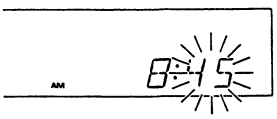




- The time is represented in 12-hour AM/PM method.
- Press the **ENTER** key. The hour is entered and the minute display starts to blink.

3 Enter the minute.

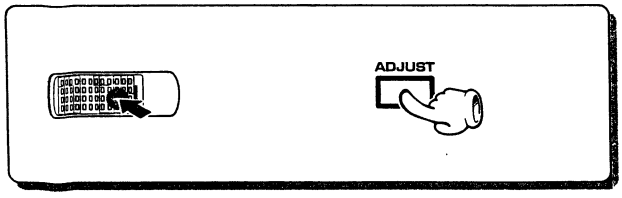


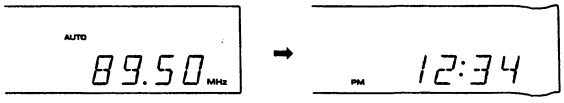


- If you make a mistake, restart from the beginning.
- To adjust correct time, press the **ENTER** key at the same moment as a time announcement.

Displaying the Time

When the power is ON, press the **ADJUST** key; the time will be displayed about 5 seconds.

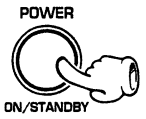




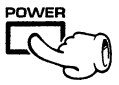
Sound adjustment functions (M-49/M-49M)

Power ON/OFF

The power of the overall system can be turned ON/OFF by pressing the POWER key of multi command unit.



Main unit



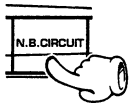
Remote control unit

Compensation of bass sound

N.B.CIRCUIT: Natural Bass CIRCUIT

Press to ON to activate automatic compensation of bass tone.

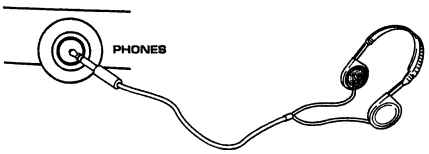
Lights up. N.B.



- Press the key again to cancel the N.B. CIRCUIT.

Listening through headphones

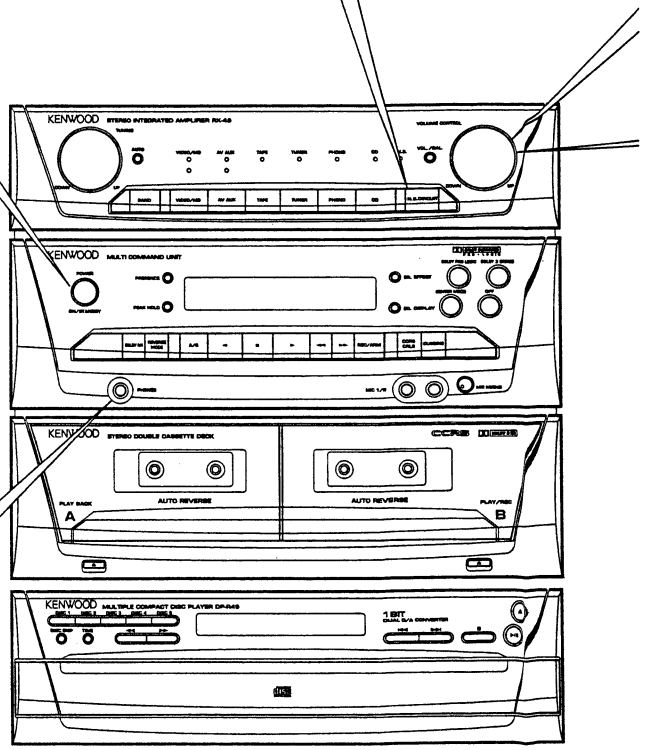
❶ Insert the headphone plug into the PHONES jack.



- The sounds from all speakers are cut off.

❷ Adjust the volume.

- Minimize the volume before plugging or unplugging the plug.



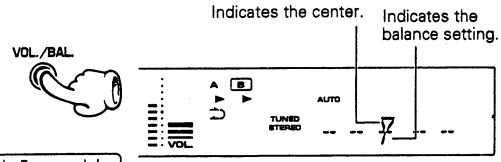
The common illustration shows the front view of M-49M(DP-R49).

STANDBY mode of POWER switch

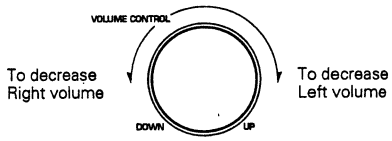
When the power cord is plugged into an AC outlet, the display lights regardless of the power ON/OFF setting. This is because, even when the power is set to OFF, a small amount of power is supplied to the system to back up the memory. This status is called the standby mode of the system. While the display is lit, the power can also be turned ON/OFF from the remote control unit.

Adjusting the left/right volume balance

❶ Switch to balance mode.

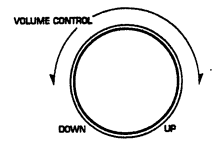


❷ Adjust the left/right balance.

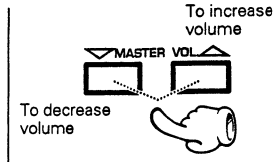


- Return to the original display is made when **VOL./BAL.** key is pressed or by waiting a few seconds.

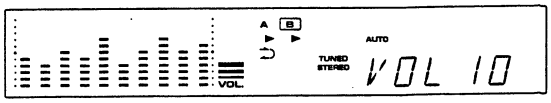
Volume adjustment



Main unit



Remote control unit

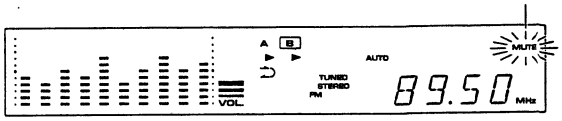


Volume display

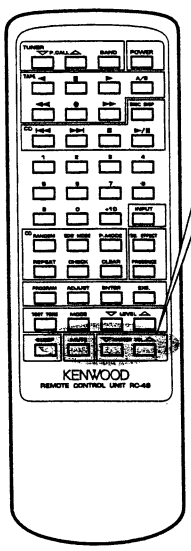
- Quick turning produces a larger change amount.

Muting the sound temporarily

Remote control unit only



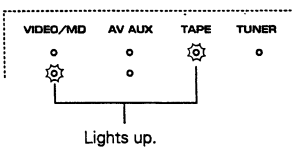
- Press again to resume the original volume.



In regard to input selector switch and indicator

With this unit it is possible to switch the audio while watching the video system. (However, this requires connection of separately sold video equipment. –10)

Example : When switching to TAPE is executed during video system playback with VIDEO/MD selected, VIDEO/MD will light green and TAPE will light red.



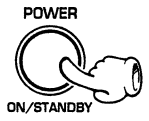
Input selection on the amplifier unit and easy operation function

With the easy operation function, simply selecting an input source with the input selector keys (TAPE, TUNER, CD, etc.) of the amplifier unit start playback of the selected source component. On the contrary, starting playing a component switches the input selectors automatically to that input source. The same operation is also possible with the INPUT key of the remote control unit. When the power is switched ON, the source which has been input before the power was switched OFF last time (TUNER, CD, etc.) will be played.

Sound adjustment functions (M-29/M-29M)

Power ON/OFF

The power of the overall system can be turned ON/OFF by pressing the POWER key of multi command unit.



Main unit

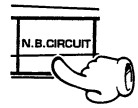
Remote control unit

Compensation of bass sound

N.B.CIRCUIT: Natural Bass CIRCUIT

Press to ON to activate automatic compensation of bass tone.

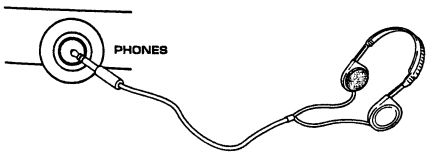
Lights up. N.B.



● Press the key again to cancel the N.B. CIRCUIT.

Listening through headphones

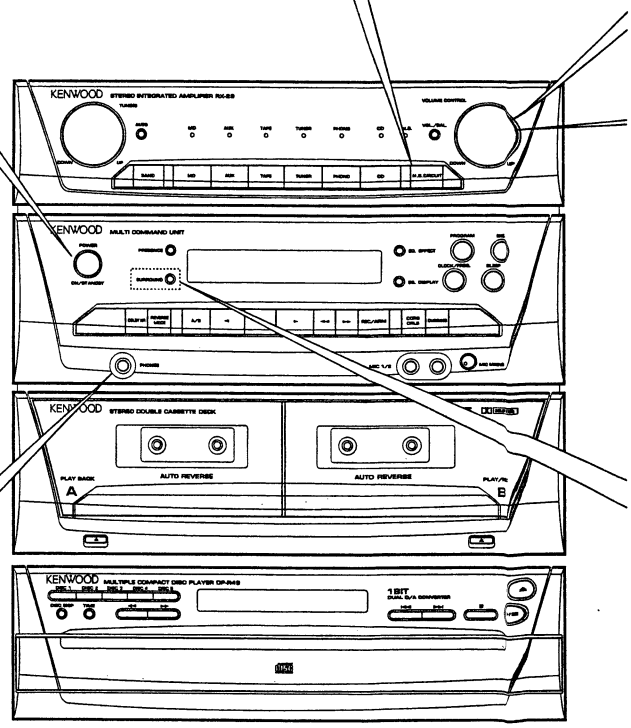
❶ Insert the headphone plug into the PHONES jack.



● The sounds from all speakers are cut off.

❷ Adjust the volume.

● Minimize the volume before plugging or unplugging the plug.



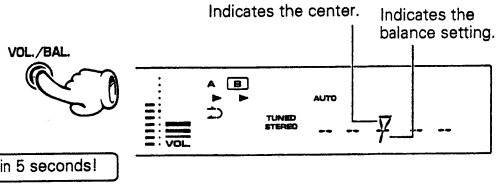
The common illustration shows the front view of M-29M(DP-R49).

STANDBY mode of POWER switch

When the power cord is plugged into an AC outlet, the display lights regardless of the power ON/OFF setting. This is because, even when the power is set to OFF, a small amount of power is supplied to the system to back up the memory. This status is called the standby mode of the system. While the display is lit, the power can also be turned ON/OFF from the remote control unit.

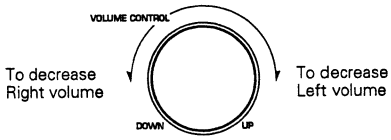
Adjusting the left/right volume balance

❶ Switch to balance mode.



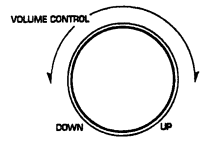
Within 5 seconds!

❷ Adjust the left/right balance.

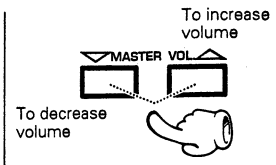


- Return to the original display is made when **VOL./BAL.** key is pressed or by waiting a few seconds.

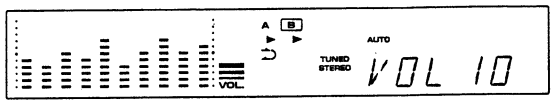
Volume adjustment



Main unit



Remote control unit

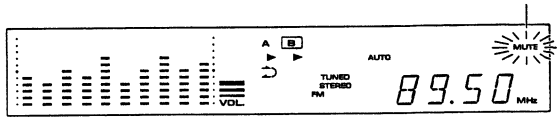


Volume display

- Quick turning produces a larger change amount.

Muting the sound temporarily

Remote control unit only



- Press again to resume the original volume.

Notes on the PEAK HOLD key

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(For U.K., Europe and Australia)

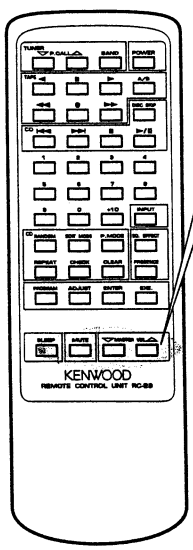
The Peak Hold display can be extinguished by pressing the PEAK HOLD key when the spectrum analyzer is being displayed.

Notes on the SURROUND key

(Except for U.K., Europe and Australia)

This key is used only when optional surround (rear) speakers are connected. Set the key to ON to enjoy the surround effect and to OFF for ordinary playback.

- From the viewpoint of sound quality, it is not recommended to set the key to ON while the surround (rear) speakers are not connected.
- Sound is not output from the surround (rear) speakers if this key is set to OFF.



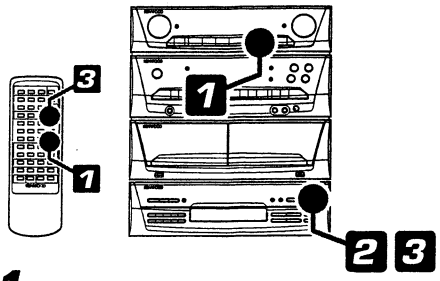
Input selection on the amplifier unit and easy operation function

With the easy operation function, simply selecting an input source with the input selector keys (TAPE, TUNER, CD, etc.) of the amplifier unit start playback of the selected source component. On the contrary, starting playing a component switches the input selectors automatically to that input source. The same operation is also possible with the INPUT key of the remote control unit. When the power is switched ON, the source which has been input before the power was switched OFF last time (TUNER, CD, etc.) will be played.

Playback of CD

M-49/M-29 only
For the operation of M-49M/M-29M: –29 to –35

Use the following procedure to play a CD in the original order of tracks from track No. 1.



Playing tracks in order from track No. 1

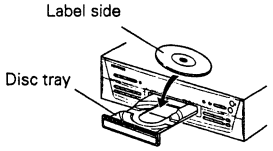
1 Select the "CD" input.

- Playback starts when a disc has been loaded.

2 Load a disc.

❶ **Open the tray.**

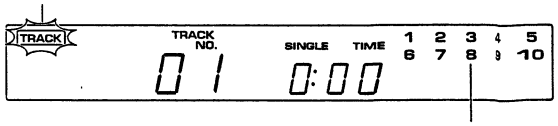
❷ **Place a disc.**



❸ **Close the tray.**

- Do not touch the played side of disc.
- Load only one disc at a time.
- Place the disc properly along the groove on the tray. (If the disc is not placed horizontally, malfunction will result.)
- A single CD (8 cm disc) can also be played.
- Ordinary CD single (8 cm) disc adapters sold in audio stores cannot be used with this unit.

Lights up.

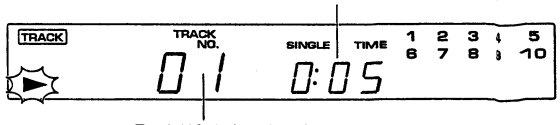


The recorded track Nos. are shown.

3 Start playback.

- After a few seconds, play starts from the track No.1.

Elapsed time of track being played



Track NO. being played

To pause playback

- Each press pauses and plays the CD alternately.

To stop playback

Playback from desired track

M-49/M-29 only
For the operation of M-49M/M-29M: –29 to –35

Preparation
- Select the **"CD"** input.
- Load a disc in the CD player.

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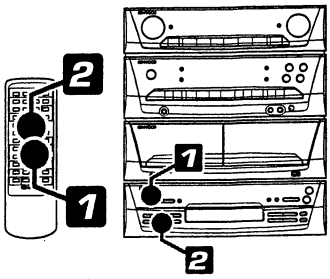
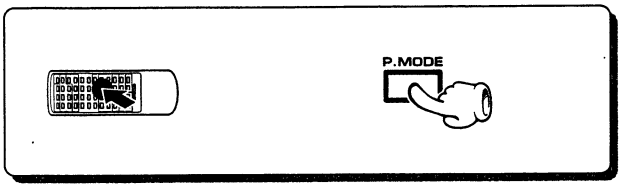
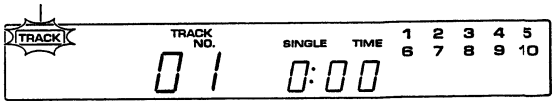


1 Press so that the "TRACK" indicator lights.

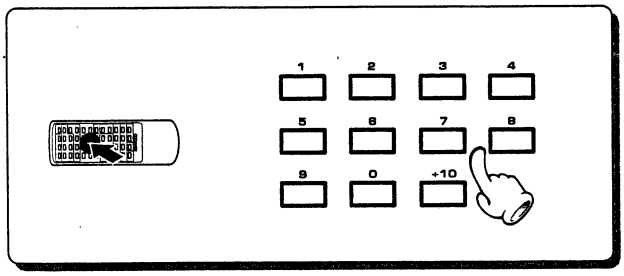


Lights up.



- If the **"PGM"** indicator is lit, press the **P.MODE** key.

2 Select the desired track No.

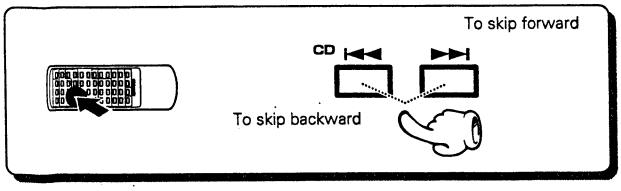


Press the numeric keys as shown below....

To enter track No. 23 : +10 +10 3
To select track No. 40 : +10 +10 +10 +10 0

- Playback starts from the selected track and continues on the subsequent tracks.
- If a track No. which does not exist on the disc is selected while the disc tray is open, the last track on the disc will be played.

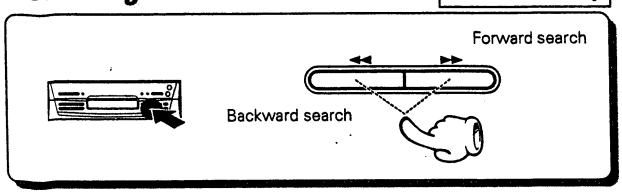
Skipping tracks



- The track in the direction of the pressed key is skipped, and the selected track will be played from the beginning.
- When the ⏮ key is pressed once during playback, the track being played will be played from the beginning.

Searching

Main unit only



- Playback starts from the position where the key is released.

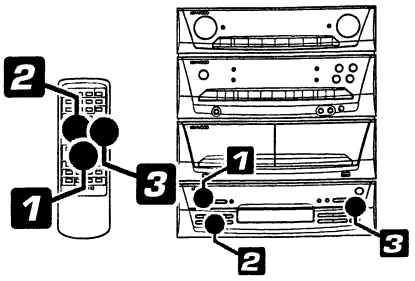
Programming tracks in desired order

M-49/M-29 only
For the operation of M-49M/M-29M: –29 to –35

Preparation

- Select the **"CD"** input.
- Load a disc in the CD player.

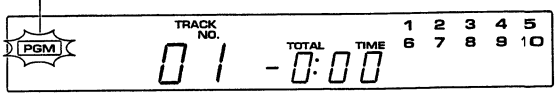
–24



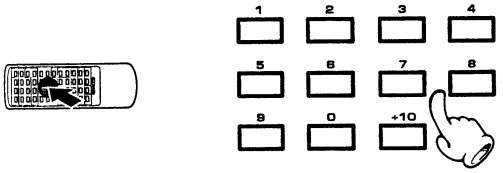
1 Press so that the "PGM" indicator lights.

Lights up.

"SINGLE TIME" changes to "TOTAL TIME".



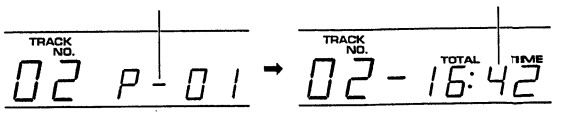
2 Enter track Nos. in the order you want to play them.



Press the numeric keys as shown below....
To enter track Nos. 2, 5 and 25: [2] [5] [+10] [+10] [5]

Displays the entered track No. for a few seconds.

Displays the total playing time of the programmed tracks.



- Up to 20 tracks can be programmed. When "FULL" is displayed, no more tracks can be programmed.
- If you make a mistake, press the **CLEAR** key and enter the track No. from the beginning.
- Track numbers can also be selected while the tray is open.

3 Start playback.

- Tracks will be played in the order they were programmed (in order of P Nos.).
- When the ⏮ or ⏭ key is pressed during playback, the program will jump to the preceding or the following track respectively.
- When the ⏮ key is pressed once during playback, the play position returns to the beginning of the current track being played.

To stop playback

To return to playback in order of track Nos.

- Playback in the original order of tracks starts with the track being played.

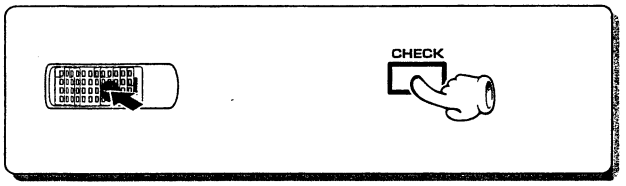
M-49/M-29 only
For the operation of M-49M/M-29M: –29 to –35

Auto space function

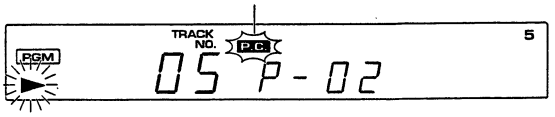
When the **SPACE** key is pressed during programming of tracks, a non-recorded space of a few seconds will be created between tracks. By recording tracks with these spaces on tape, the search and repeat play operations of tape using the DPSS function (which works by searching the non-recorded spaces) can be performed reliably.

- Even when the performances of two tracks are continuous (which occurs with classical or live recording music), the spaces will be created if they have different track Nos.
- The displayed total playing time will include these non-recorded spaces.
- To cancel the auto space function, press the **P.MODE** key or the **SPACE** key again.

To check the programmed tracks

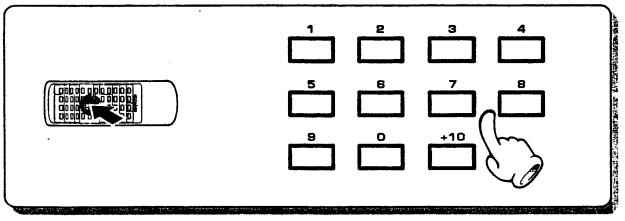


Lights up.



- Each time the key is pressed, the program No. (P-NO) and the track No. on CD are displayed.
- The previous display resumes in a few seconds.

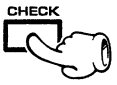
To add a track to the program



- When a track No. is entered, the track will be added to the end of the existing program.

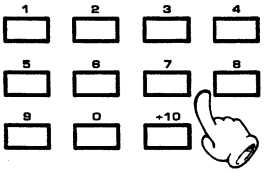
To change a track in the program

❶

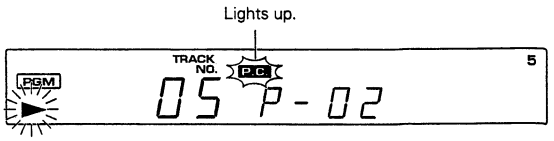


Press until the track No. to be changed is displayed.

❷ **Enter the new track No.**



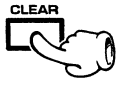
Lights up.



- Press while the **P.C.** indicator is lit.
- The track being played cannot be changed.

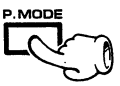
To clear tracks from the program

Press to clear tracks from the end.



- Each time the **CLEAR** key is pressed, the last track in the program is cleared.
- The track being played cannot be clear.

To clear all track



- The entire program is cleared.

Repeated playback

M-49/M-29 only
For the operation of M-49M/M-29M: –29 to –35

Preparation
- Select the **"CD"** input.
- Load a disc in the CD player.

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Time display on CD player

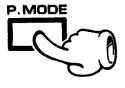
Each press of the **TIME** key changes the displayed contents.

① SINGLE TIME 1:23 : Elapsed time of track being played
② SINGLE TIME -2:37 : Remaining time of track being played : When playing the 44th track or later, the display will show "–:–:–".
③ TOTAL TIME 23:45 : Elapsed time of entire disc
④ TOTAL TIME -36:15 : Remaining time on entire disc

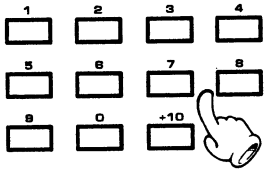
- Only **SINGLE TIME** is displayed in RANDOM and EDIT modes.

To repeat only the programmed tracks

❶ **Press so that the "PGM" indicator lights.**



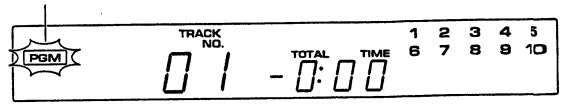
❷ **Program desired tracks.**



❸ **Switch REPEAT ON.**

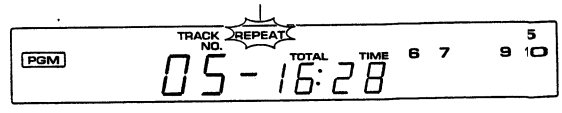
❹ **Start playback.**

Lights up.



- All of the programmed tracks will be repeated.
- In case only one track is programmed, only that track will be repeated.
- Up to 20 tracks can be programmed. When "FULL" is displayed, no more tracks can be programmed.

Lights up.

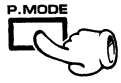


To cancel repeated playback

Press the REPEAT key again.

To repeat the entire disc

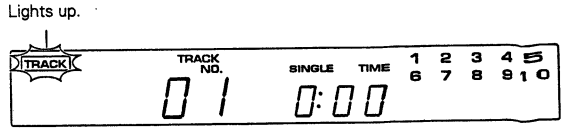
❶ **Press so that the "TRACK" indicator lights.**



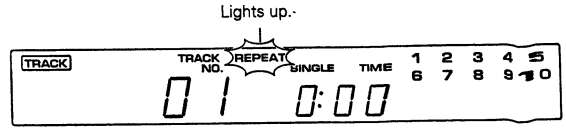
❷ **Switch REPEAT ON.**

❸ **Start playback.**

Lights up.



Lights up.



To cancel repeated playback

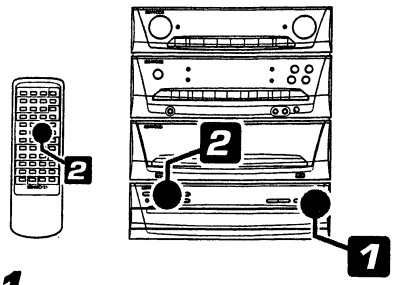
Press the REPEAT key again.

Playback of CD

M-49M/M-29M only
For the operation of M-49/M-29: –24 to –28

Use the following procedure to play CDs in the original order of tracks from track No. 1.

When a disc is placed into the CD player in advance, the CD will be played when the CD key is pressed.

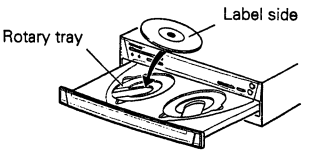


Playing tracks in order from track No. 1

1 Load a disc.

❶ Open the tray.

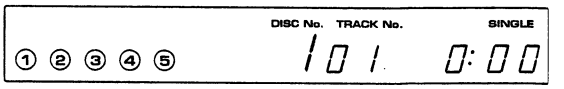
❷ Place a disc.



❸ Close the tray.

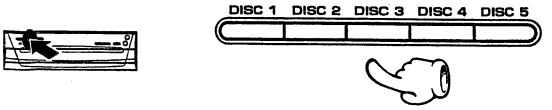
- Do not touch the played side of disc.
- When inserting three or more discs, use the **DISC SKIP** key to rotate the tray.
- When inserting a disc while the tray rotates, a malfunction might occur. Insert the disc when the tray does not rotate.
- Place the disc properly along the groove on the tray. (If the disc is not placed horizontally, malfunction will result.)
- A single CD (8 cm disc) can also be played.
- Ordinary CD single (8 cm) disc adapters sold in audio stores cannot be used with this unit.

All disc indicators "O" light regardless of how many discs are present.

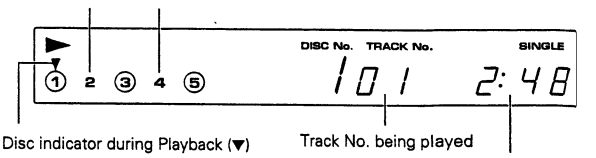


2 Start playback.

Select the disc No.



If there is no disc in the selected disc tray, the corresponding indicator goes out.



- Playback starts from the selected disc and continues in order of disc Nos.
- When the ▶/II key is pressed without selecting a disc, playback will start from the indicatated DISC NO.

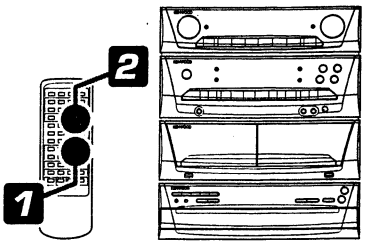
To pause playback

- Each press pauses and plays the CD alternately.

To stop playback

Playback from desired track

M-49M/M-29M only
For the operation of M-49/M-29: –24 to –28



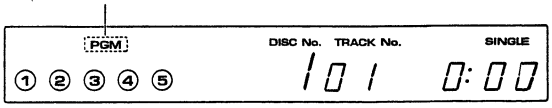
Preparation
- Select the **"CD"** input.
- Load a disc in the CD player.

–29

1 Press so that the "PGM" indicator goes off.

- If the **"PGM"** indicator is lit, press the **P.MODE** key.

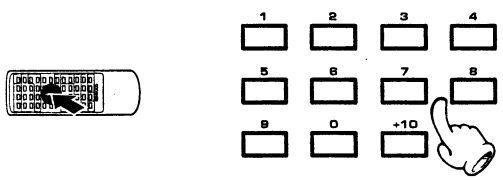
Goes off.



2 Select the desired track No.

❶ Select the disc.

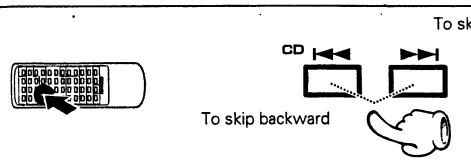
❷ Select the desired track No.



Press the numeric keys as shown below....
To enter track No. 23 : +10 +10 3
To select track No. 40 : +10 +10 +10 +10 0

- Playback starts from the selected track and continues on the subsequent tracks.

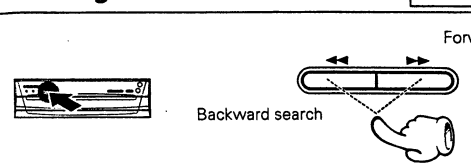
Skipping tracks



- The track in the direction of the pressed key is skipped, and the selected track will be played from the beginning.
- When the ⏮ key is pressed once during playback, the track being played will be played from the beginning.

Searching

Main unit only



- Playback starts from the position where the key is released.

Programming tracks in desired order

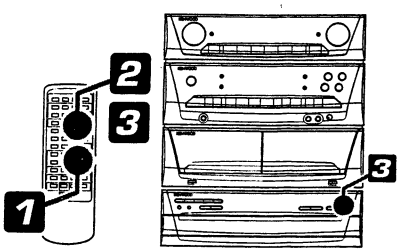
M-49M/M-29M only
For the operation of M-49/M-29: –24 to –28

Use the following procedure to select desired tracks (up to 32 tracks) from up to 5 discs and program them in the desired order.

Preparation

–29

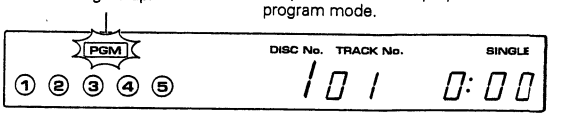
- Select the **"CD"** input.
- Load discs in the CD player.



1 Press so that the "PGM" indicator lights.

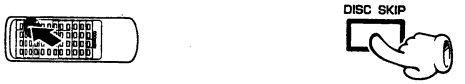
Lights up.

Only **"SINGLE"** is displayed in program mode.



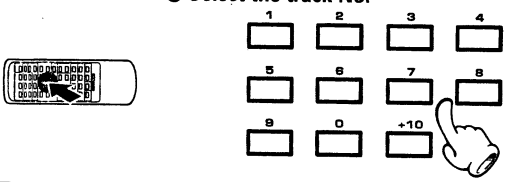
2 Enter track Nos. in the order you want to play them.

❶ **Select the disc No.**

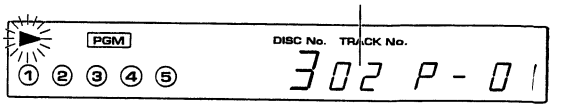


Within 8 seconds!

❷ **Select the track No.**



Displays the entered track No.



- Up to 32 tracks can be programmed. When "FULL" is displayed, no more tracks can be programmed.
- If you make a mistake, press the **CLEAR** key and enter the track No. from the beginning.
- If the track No. is not selected within 8 seconds after having selected the disc No., all of the tracks on the disc will be programmed. "**ALL**" indicator lights.)
- If a disc No. which is not present in the magazine is entered, it is programmed temporarily but canceled at the time of playback.

To select tracks from more than one CD, repeat steps ❶ and ❷ above.

3 Start playback.

- Tracks will be played in the order they were programmed (in order of P Nos.).
- When the ⏮ or ⏭ key is pressed during playback, the program will jump to the preceding or the following track respectively.

To stop playback

To return to playback in order of track Nos.

- Playback in the original order of tracks starts with the track being played.

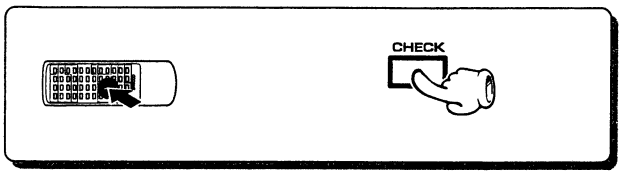
M-49M/M-29M only
For the operation of M-49/M-29: –24 to –28

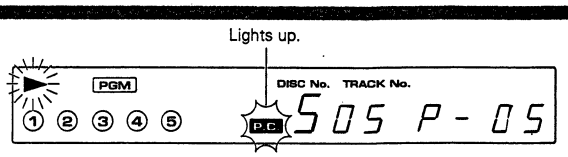
Auto space function

When programming tracks, a non-recorded space of a few seconds will be created automatically between tracks. By recording tracks with these spaces on tape, the search and repeat play operations of tape using the DPSS function (which works by searching the non-recorded spaces) can be performed reliably.

- Even when the performances of two tracks are continuous (which occurs with classical or live recording music), the spaces will be created if they have different track Nos.

To check the programmed tracks

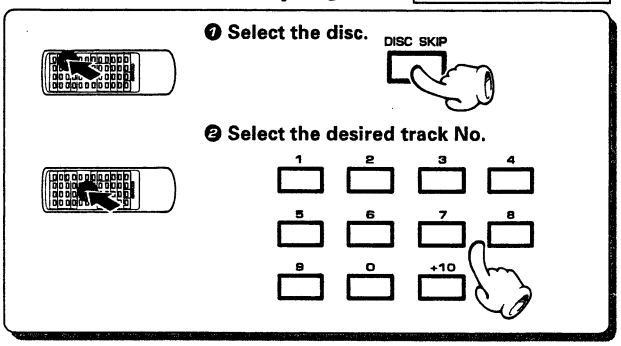




- Each time the key is pressed, the program No. (P-NO) and the disc No. are displayed.
- The previous display resumes in a few seconds.

To add a track to the program

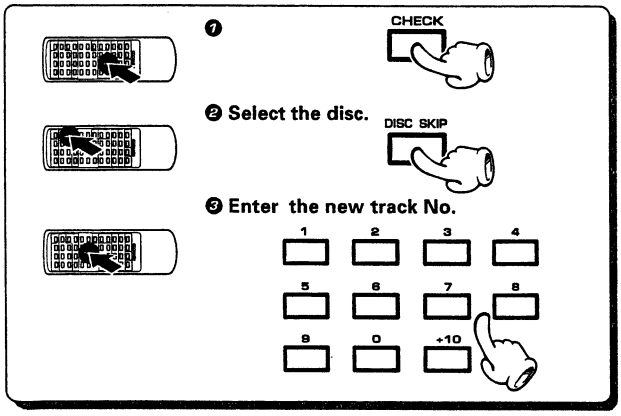
Stop mode only

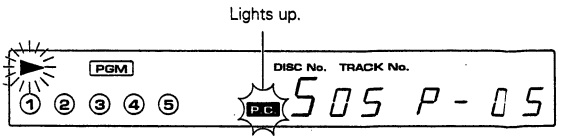


- When a track No. is entered, the track will be added to the end of the existing program.

To change a track in the program

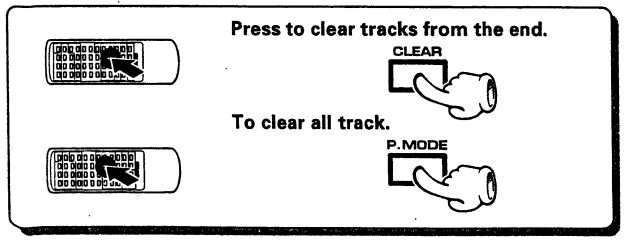
Stop mode only





- Press the **CHECK** key repeatedly until the track No. to be changed is displayed.
- Press while the **"P.C."** indicator is lit.

To clear tracks from the program



- Each time the **CLEAR** key is pressed, the last track in the program is cleared.
- The track being played cannot be cleared.
- The entire programmed contents are also cleared when the ⏏ key is pressed.

Repeated playback

M-49M/M-29M only
For the operation of M-49/M-29: –24 to –28

Preparation

- Select the **"CD"** input.
- Load a disc in the CD player.

–29

Time display on CD player

Each press of the **TIME** key changes the displayed contents.

① 1:23 (SINGLE) : Elapsed time of track being played
② -2:37 (SINGLE) : Remaining time of track being played
③ 23:45 (TOTAL) : Elapsed time of entire disc
④ -36:15 (TOTAL) : Remaining time on entire disc

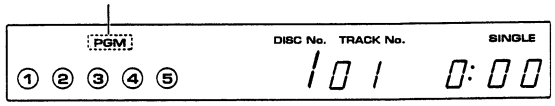
- Only the **SINGLE** displays are shown in the PGM, EDIT and RANDOM modes.

To repeat all discs

All tracks on all of the discs loaded on the disc tray will be played repeatedly.

❶ Press so that the "PGM" indicator goes off.

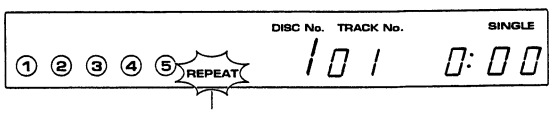
Goes off.



❷ Switch REPEAT ON.

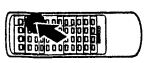
Each press switches the repeat mode.

① **REPEAT**
② Repeat OFF



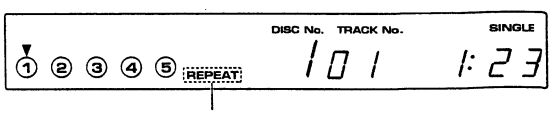
Lights up.

❸ Select the disc to be played first.



To cancel repeated playback

Press the REPEAT key again.



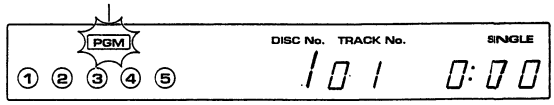
Goes off.

M-49M/M-29M only
For the operation of M-49/M-29: –24 to –28

To repeat only the programmed tracks

❶ Press so that the "PGM" indicator lights.

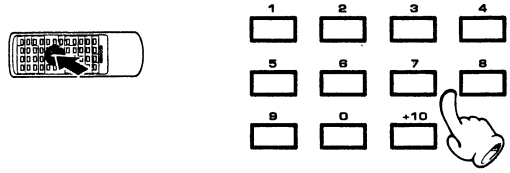
Lights up.



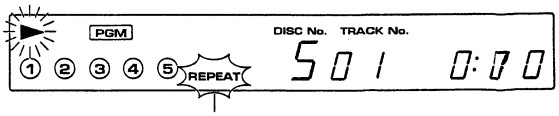
❷ Select the disc.

Within 8 seconds!

❸ Select the track No.



- All of the programmed tracks will be played repeatedly.
- Up to 32 tracks can be programmed by repeating steps ❷ and ❸. When "FULL" is displayed, no more tracks can be programmed.



Lights up.

❹ Switch REPEAT ON.

❺ Start playback.

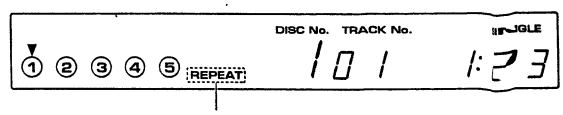
To listen to the same CD repeatedly.

❶ Press so that the "PGM" indicator lights.
❷ Select the disc.
❸ Wait 8 seconds.
❹ Switch REPEAT ON.
❺ Press the ►/II key.

- The ►►I key is disabled.

To cancel repeated playback

Press the REPEAT key again.



Goes off.

Playback in a random order (Random playback)

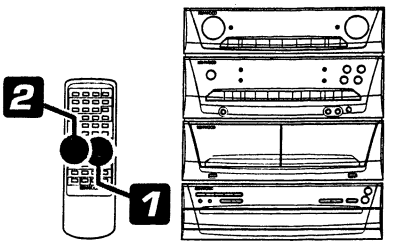
M-49M/M-29M only
For the operation of M-49/M-29: –24 to –28

As tracks are selected at random, you can enjoy listening to for a long time.

Preparation

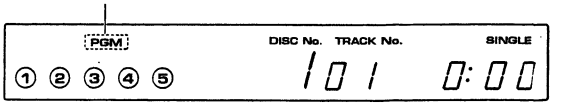
- Select the **"CD"** input.
- Load discs in the CD player.

–29



1 Press so that the "PGM" indicator goes off.

Goes off.



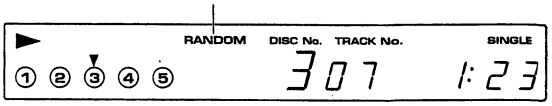
2 Press the RANDOM key.

Each press switches the mode as follows.

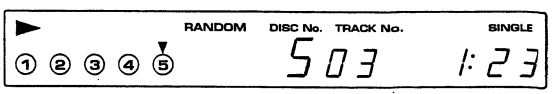
① **RANDOM**
② No indication : Random playback is OFF.

Example when track No. 7 of disc No. 3 is selected first

"RANDOM" indicator



Example when track No. 3 of disc No. 5 is selected next



- Random playback ends when all of the tracks on the discs have been played once.
- Random playback can be repeated by pressing the **REPEAT** key.

To select another track in the middle of playing one

- Pressing the ⏮ key once returns to the beginning of the track being played.

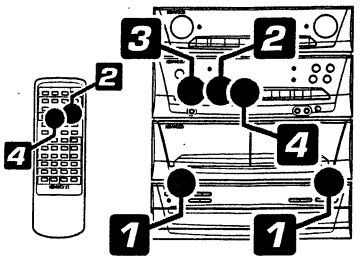
To cancel random playback

Press so that the "RANDOM" indicator goes off.

- Playback in the original order of tracks starts with the track being played.

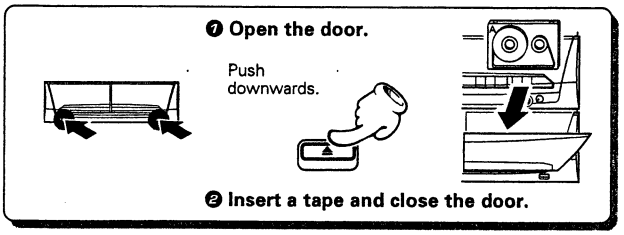
Playback of tape

When a tape is placed into the cassette deck in advance, the tape will be played when the TAPE key is pressed.



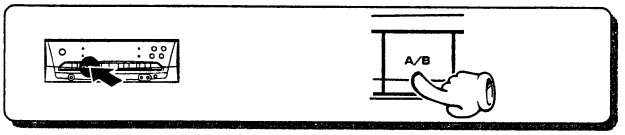
Tape playback

1 Load a cassette tape.

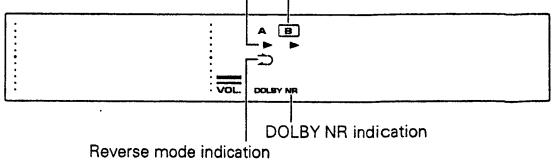


- The type of tape, that is, TYPE I (Normal), TYPE II (Chrome) or TYPE IV (Metal), is set automatically.
- Remove tape slack before loading.
- Close the door securely.

2 Select the deck to be used for playback. Stop mode only

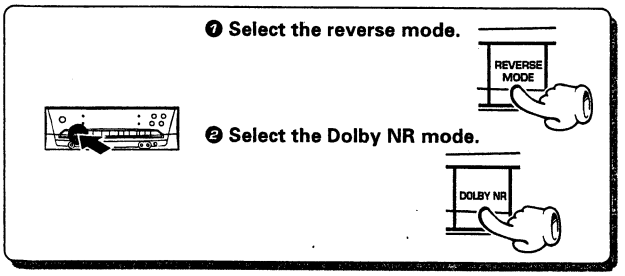


Tape transport direction.
The selected deck is displayed inside □.



DOLBY NR indication
Reverse mode indication

3 Select the playback modes.

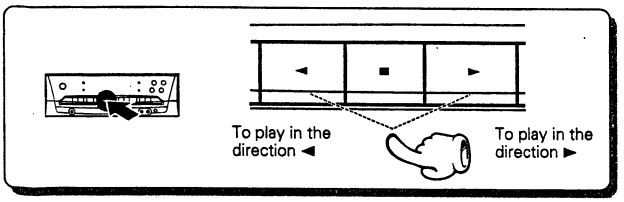


Each press switches the modes as follows.
- ① "⇄" ... Endless playback occurs.
- ② "⇄" .... Playback stops after having played one side.
- ③ "⇉" .... Playback stops after having played both sides.
  (If the ◄ key is pressed, only one side will be played and tape will stop after it.)

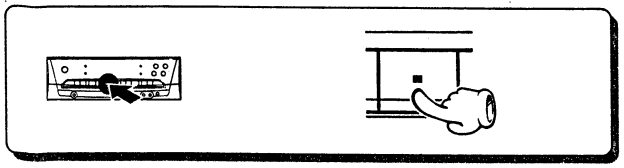
- ① **DOLBY NR "ON"** ..... Dolby B NR.
- ② **DOLBY NR "OFF"**
  (no indication) ..... Dolby NR is not used.

- Select the Dolby NR mode according to the recording condition of the tape.

4 Start playback.

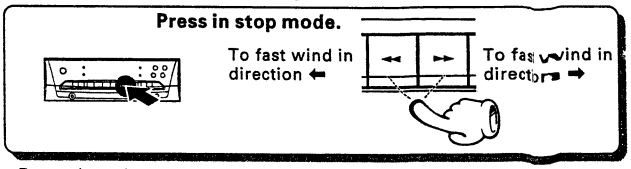


To stop playback



- Do not press the eject key until the tape has stopped completely.

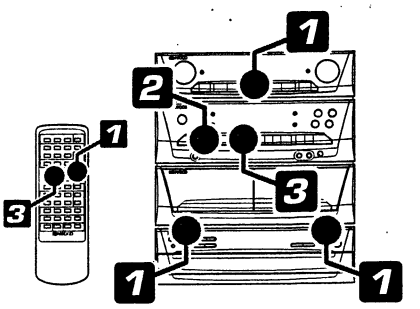
To wind tape at high speed



- Press the ■ key to stop fast winding.

Relay playback

Use the following procedure to play tapes in decks A and B alternately.

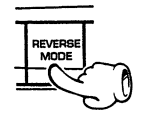


1 Load tapes.

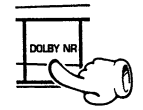
Insert tapes and close both cassette holders.

2 Select the playback modes.

❶ Select "⊃".



❷ Select the Dolby NR mode.



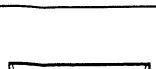
Each press switches the modes as follows.

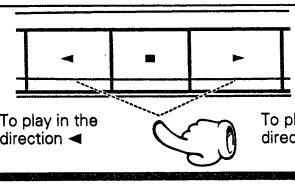
① "⇄" ..... Relay playback does not occur with this position.
② "⇄" ..... Relay playback does not occur with this position.
③ "⊃" ..... The two sides of tapes in decks A and B will be played repeatedly.

① **DOLBY NR "ON"** ..... Dolby B NR.
② **DOLBY NR "OFF"**
(no indication) ..... Dolby NR is not used.

● Select the Dolby NR mode according to the recording condition of the tape.

3 Start playback.

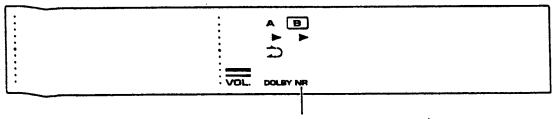




● Relay playback starts with the selected deck.

Dolby Noise Reduction (NR)

The Dolby NR system is used to minimizes the hiss noise heard when playing tape. This system uses the Dolby B type.
When playing a tape prerecorded with Dolby NR ON, be sure to set the DOLBY NR ON for playback.

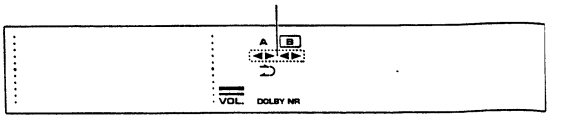


Lit when DOLBY NR is ON.

Transport direction indicators

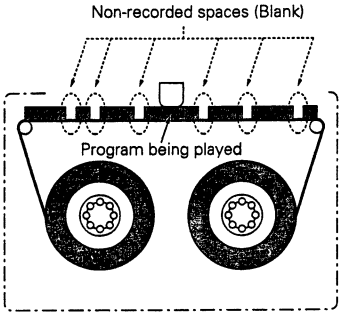
The ◄ and ► indicators indicate the current direction in which the tape advances when playback or recording is started automatically by the easy operation function, etc. This direction is the direction stored in memory when the tape was last stopped.
(To change the direction, press the ◄, ► key for the opposite direction then press the ■ key.)

Transport direction indicators



DPSS (Direct Program Search System)

The DPSS is capable of detecting non-recorded spaces of more than 4 seconds as "blanks between programs". It can be used in two ways as described below.



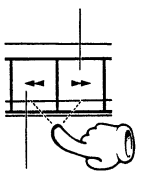
1. **Skip search** : **Plays the desired music program from the beginning by skipping programs until there.**
   Up to 16 programs can be skipped.

2. **One-program repeat playback** : **Plays a single music program repeatedly up to 16 times.**

Skip search

(During play in direction ►)

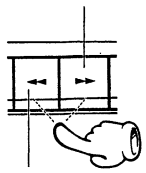
To play the next program : Press once.
To play the 4th program
after the current program : Press 4 times.



To return to the beginning
of the current program : Press once.
To play the 4th program
before the current program: Press 5 times.

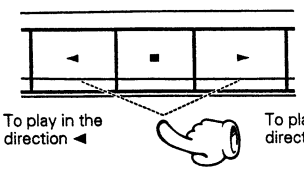
(During play in direction ◄)

To return to the beginning
of the current program : Press once.
To play the 4th program
before the current program: Press 5 times.



To play the next program : Press once.
To play the 4th program
after the current program : Press 4 times.

One-program repeat playback



To play in the direction ◄

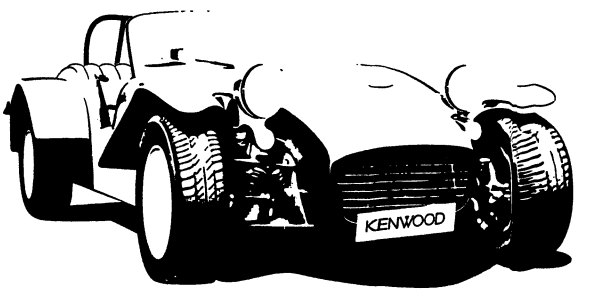
To play in the direction ►

Press during playback.

- The program being played will be repeated 16 times, after which normal playback resumes.
- When the ■ key is pressed, playback stops and the one-program repeat is canceled.

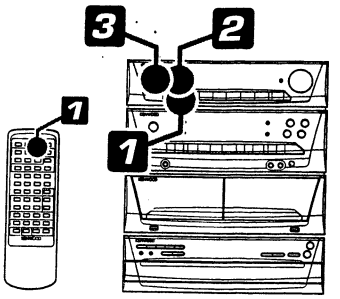
Notes

1. The DPSS cannot be used on decks A and B simultaneously.
2. The DPSS may not function normally with the following kinds of tape.
   - Tapes containing several no-sound intervals of more than 4 seconds, such as conversation and talk tapes.
   - Tapes containing pianissimo sections, such as classical music tape.
   - Tapes in which large noise is recorded in blanks between programs.
   - Tapes containing blanks between programs that are shorter than 4 seconds.
   - Tapes recorded at low level.
   - Tapes recorded by cross-fade recording (in which the beginning of next program is overlapped on the end of previous program).


KENWOOD

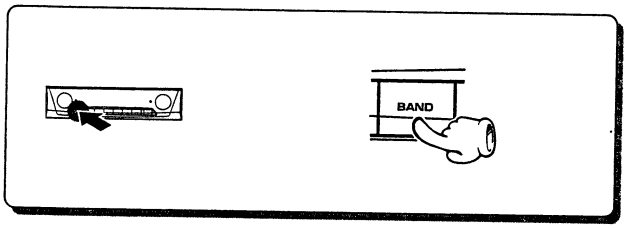
Broadcast reception

Preparation
- Select the **"TUNER"** input.

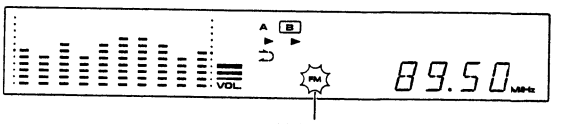


Receiving broadcast station

1 Select the broadcast band.

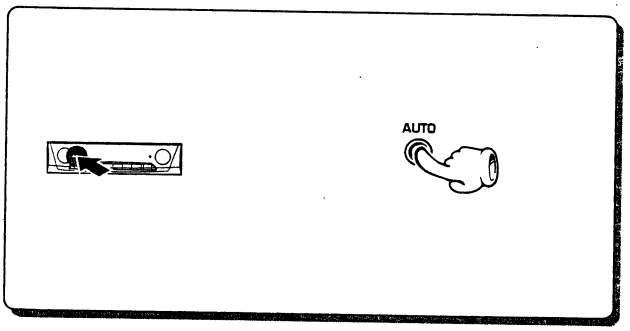


Each press alternates the band.
- ①FM
- ②AM **(For U.K. MW → LW)**



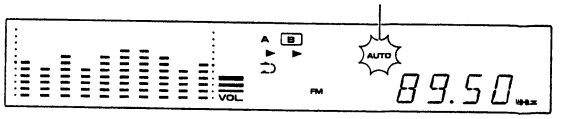
Lights up.

2 Select the tuning mode.



Each press alternates the mode.
- ①**AUTO** lit (Auto tuning)
- ②**AUTO** not lit (Manual tuning)

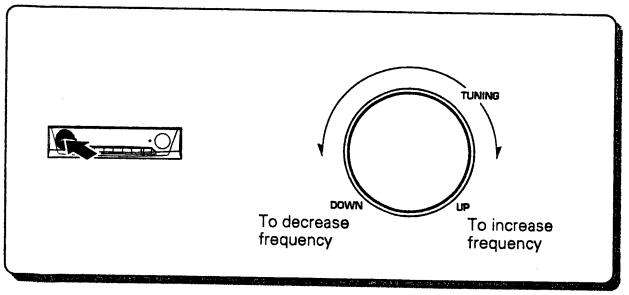
Lights up.



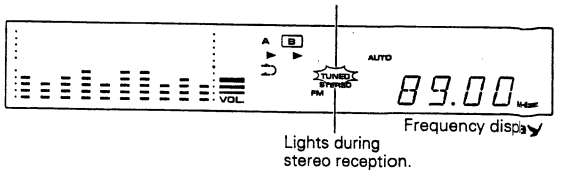
- Normally, use the **AUTO** (Auto tuning) mode.

Use the manual tuning mode when reception is noisy due to weak reception. (In the manual mode, stereo broadcasts are received in monaural.)

3 Select a station.



The **"TUNED"** indicator lights when a station is received.



Frequency display

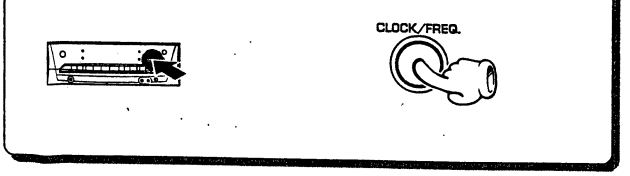
Lights during stereo reception.

Auto tuning : Every time the control is rotated, a next station will be received.

Manual tuning : Frequencies vary continuously while the control is kept rotated.

CLOCK/FREQ. key (M-29/M-29M only)

Every time the **CLOCK/FREQ.** key is pressed, the display contents change.



Each press changes the display as follows.
- ① Frequency display : The frequency being received is displayed.
- ② Clock display : When an operation related to turning is done, these change to the frequency display for a few seconds.

- While the power is OFF, the display shows time of the day.

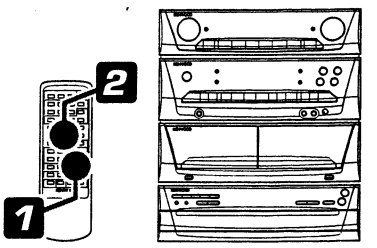
Storing radio stations in memory (Station preset)

It is possible to receive broadcasts by one-touch operations by storing up to 40 stations in the preset memory.

Preparation

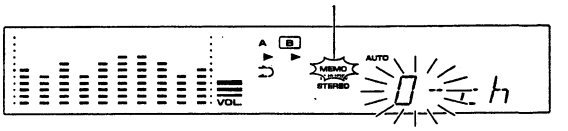
- Receive a station to be stored in preset memory.

-40



1 Press the ENTER key during reception.

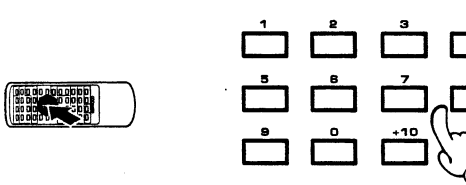
MEMO lights up (for approx. 5 sec.).



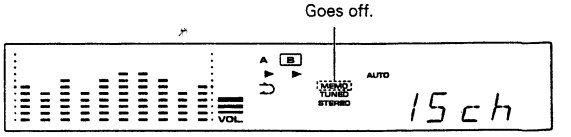
Go to step 2 within 5 sec.

If more than 5 seconds have elapsed, press the **ENTER** key again.

2 Select one of the preset numbers from 1 to 40.



Goes off.



Press the numeric keys as follows.

To store the station in preset "15" : [+10] [5]

To store the station in preset "40" : [+10] [+10] [+10] [+0] [0]

- The station being received will be stored in preset memory.
- Repeat steps 1 2 to preset other stations.
- If several stations are preset under the same number, the previous memory is replaced with the latest memory contents.

Receiving a preset station

1 Select the tuner mode.

2

- Every time the **P.CALL** key is pressed, the preset stations are switched over as follows.

Press △ for the order of 1→2→3 ... 38→39→40→1...

Press ▽ for the order of 40→39→38 ... 3→2→1→40...

- When a key is held depressed, preset stations will be skipped at an interval of about 1 second.

Press the numeric keys as follows.

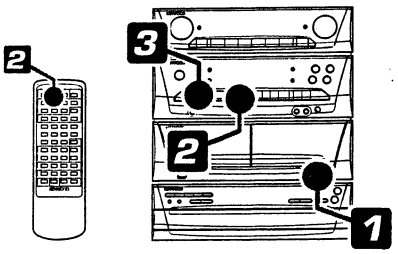
To call "15" : [+10] [5]

To call "40" : [+10] [+10] [+10] [+10] [0]

Recording (Deck B only)

This unit incorporates the CRLS (Computer-controlled Recording Level System), automatic recording level setting to allow excellent sound recording with simple operation.
→43

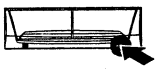
Note that this cassette deck cannot record onto Metal tapes.



Preparation for recording

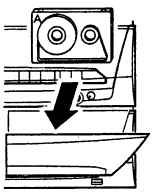
1 Load a tape in deck B.

❶ Open the door of deck B.



Push downwards.

❷ Insert a tape.



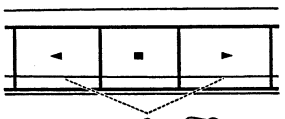
❸ Close the door.

- The type of tape, that is, TYPE I (Normal), TYPE II (Chrome), is set automatically.
- Remove tape slack before loading.
- When the microphone is not used, set the **MIC MIXING** control fully counterclockwise to the minimum position.

2 Select the tape transport direction.

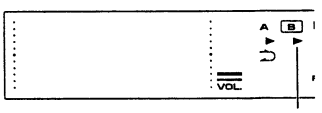
❶

To start recording in the direction ►



To start recording in the direction ◄

❷ Press the ■ key.

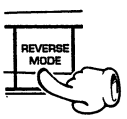


Tape transport direction

- When recording is started, the tape is transported in the direction selected in this step.
- Wind the tape to the position where recording is to be started.

3 Set the recording condition.

❶ Select the reverse mode.



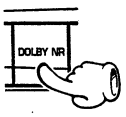
Each press of the key switches the modes as follows.

① "⇄" ..... The two tape sides are recorded, after which recording stops.

② "⇌" ..... A tape side is recorded, after which recording stops.

③ "⇉" ..... The two tape sides are recorded, after which recording stops.

❷ Select the Dolby NR mode.



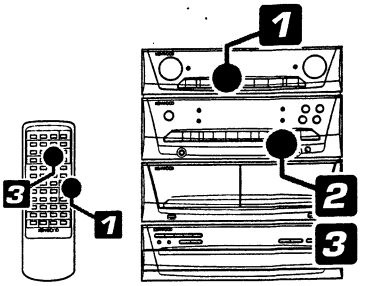
Each press of the key switches the modes as follows.

① **DOLBY NR "ON"** .... Dolby B NR.

② **DOLBY NR "OFF"**
(no indication) ..... Dolby NR is not used.

Preparation –42

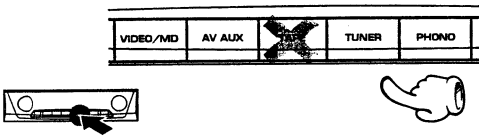
- Load a cassette tape in the deck B.
- Select the tape transport direction (◄ or ►).
- Select "⇄", "⇉" (two-side recording) or "⇄" (one- side recording).
- Select the Dolby NR mode.



Recording (Deck B only)

1 Select the source to be recorded.

Select an input source other than "TAPE".



- When recording a CD, refer to "CD Edit Recording." –46 –50

2 Start auto recording level adjustment.

❶ Play the contents to be recorded (or receive the radio station to be recorded).

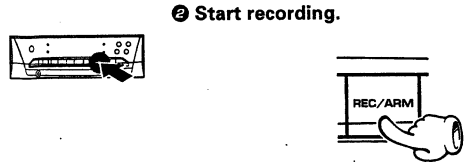
❷ Start auto recording level adjustment.

- The recording level setting is completed in approx. 20 seconds, after which the deck enters the record-pause mode.
- If a non-recorded space of more than 3 seconds is detected after the **CRLS** key is pressed, the recording level setting is aborted.
- If the **CRLS** key is pressed during the setting (while the **CRLS** indicator is blinking), the setting is interrupted and the deck enters the record-pause mode.
- If recording is started during the setting (while the **CRLS** indicator is blinking), distorted sound may be recorded.

3 Start recording.

❶ Play the contents to be recorded (or receive the station to be recorded).

❷ Start recording.



- Recording starts.
- Recording stops automatically when the tape side(s) to be recorded have been recorded.

CRLS (Computer-controlled Recording Level System)

The CRLS sets the recording level automatically in 20 seconds by analyzing the sound to be recorded.

If the key has never been pressed

The sound is recorded with the basic level set with the unit.

If the key is pressed

The recording level is set automatically and stored in memory as the recording level to be used with the current input being selected (TUNER, PHONO, etc.). From the next time on, this recording level is set automatically for that input even if the key is not pressed.

To return to the level used in previous recording

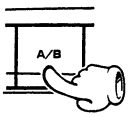
Press the ■ key while the **CRLS** indicator is blinking.

To return to the basic level

Hold the key depressed until the indicator goes off (for approx. 3 seconds).

Beat cancel function

There may be cases in which beat noise interferes with recording of AM (MW/LW) broadcasting.
In such a case, press the **A/B** key during recording to reduce or suppress the beat noise. The beat cancel function is switched off automatically at the end of the recording. The **A/B** key acts as the A/B deck selector key except during broadcast recording.

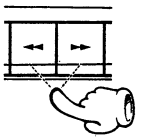


Re-recording

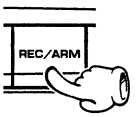
❶ Rewind tape without stopping recording.

During recording in the direction ►

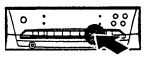
During recording in the direction ◄



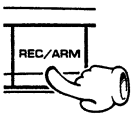
❷ Press the REC/ARM key twice.



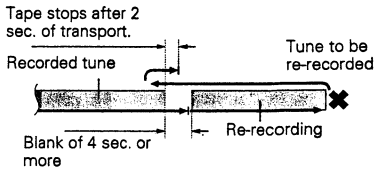
Play the music to be recorded again.



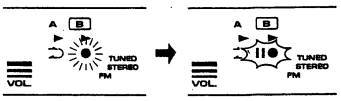
❸ Press the REC/ARM key once.



- In case there is a non-recorded blank of more than 4 seconds immediately before the recording start position, recording is stopped and tape is rewound as shown below.



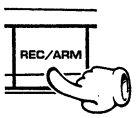
- If there is no recorded tune before, the tape will be rewound then stopped.



- After leaving a non-recorded blank of about 4 seconds, the deck enters the record-pause mode.
- When re-recording from the beginning of tape, feed the leader tape (the first portion of tape that cannot be recorded) before starting re-recording.

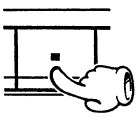
- Recording will start.

To pause recording temporarily



- After leaving a non-recorded blank of about 4 seconds, the deck enters the record-pause mode.
- Press the **REC/ARM** key again to restart recording.

To end recording in the middle



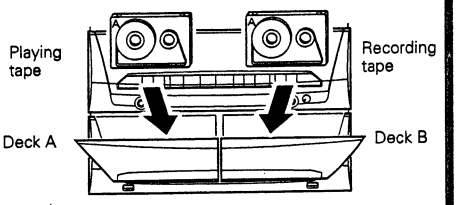
Copying tape (Tape dubbing)

The contents of the tape in deck A can be copied onto the tape in deck B.

Preparation

→42

- Select the tape transport direction (◄ or ►).
- Select "⇄","⇉" (two-side recording) or "⇄" (one- side recording).



Start dubbing.

- Dubbing ends automatically when the side(s) to be dubbed has been completed.

To pause dubbing

- Only deck B enters the record-pause mode after leaving a non-recorded space of approx. 4 seconds, and deck A stops.
- To restart dubbing, press the **DUBBING** key again.

To stop dubbing

- Both decks A and B stop.

Notes

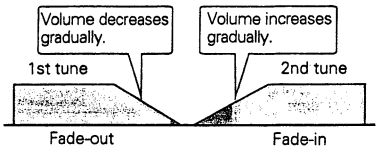
1. The recording level adjustment is not necessary in dubbing.
2. The **DOLBY NR** key is not active in dubbing mode. The tape recorded on deck B is given the same Dolby NR condition as the tape played on deck A.

CD edit recording

M-49/M-29 only
For the operation of M-49M/M-29M: –50 to –53

The system is capable of three types of edit recording which may be selected as follows:

Fade-in/fade-out



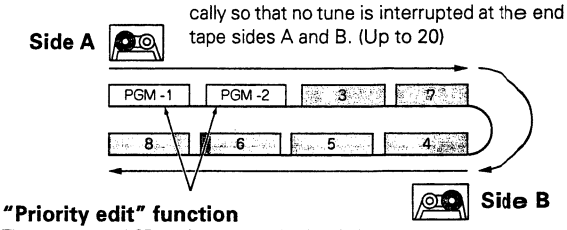
Fade-out : Ending a tune by gradually decreasing the volume.
Fade-in : Starting a tune by gradually increasing the volume.

Select the type of edit recording

When you want to record CD tracks within the specified tape length so that no track is interrupted in the middle.

Timed edit recording –47

The order of CD tracks are changed automatically so that no tune is interrupted at the end of tape sides A and B. (Up to 20)

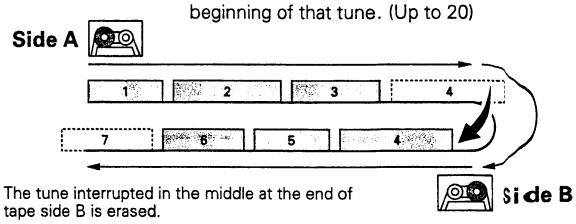


"Priority edit" function
The programmed CD tracks are recorded in priority over other CD tracks.

When you want to record desired CD tracks in desired order.

Program edit recording –48

CD tracks are recorded in the order they are programmed. The tune interrupted at the end of tape side A is erased and side B starts from the beginning of that tune. (Up to 20)

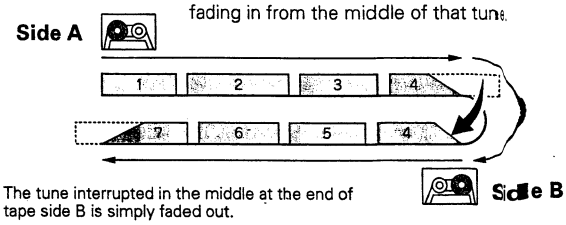


The tune interrupted in the middle at the end of tape side B is erased.

When you want to record CD tracks sequentially from No. 1.

Fade edit recording –49

CD tracks are recorded in the order they are recorded. The tune interrupted at the end of tape side A is faded out and side B starts with fading in from the middle of that tune.



The tune interrupted in the middle at the end of tape side B is simply faded out.

- Depending on the disc type, the fade effect may be small.

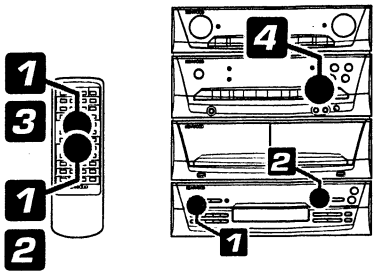
CCRS (Computer Controlled Recording System)

The CCRS allows you to record CD on tape with a one-touch operation.
When the CCRS key is pressed, the contents of CD are checked in approx. 90 seconds (variable depending on CD contents), the recording level is automatically set accordingly and recording starts. After the recording, it is also stopped automatically.
The edited data is cleared when the power is turned OFF or when the CD is stopped.

Timed edit recording

By specifying the recording time of the tape used, CD tracks can be recorded with their order automatically changed so that no tune is interrupted at the end of tape sides A and B. If there are favorite CD tracks to be recorded in priority over others, they can be recorded in the beginning of tape by programming them. (Priority edit function)

M-49/M-29 only
For the operation of M-49M/M-29M: –50 to –53



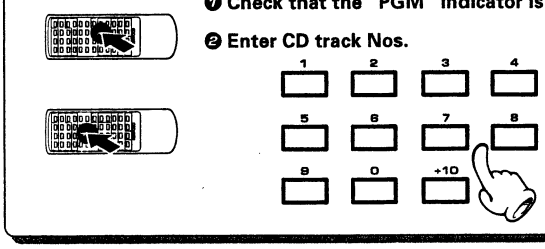
Preparation

–42

- Load a cassette tape in the deck B.
- Select the tape transport direction (◄ or ►).
- Select "⇨","⇦" (two-side recording).
- Select the Dolby NR mode.
- Select the **"CD"** input.
- Insert a disc in the CD player.

1 Select the CD tracks to be recorded in priority.

(Priority editing)
(Go to step 2 if this operation is not required.)



❶ Check that the "PGM" indicator is lit.

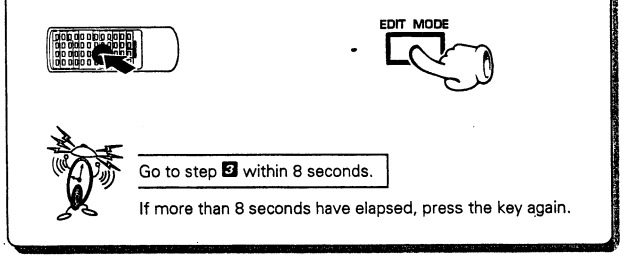
❷ Enter CD track Nos.

Press the numeric keys as shown below...
To enter track Nos. 2: [2]
To enter track Nos. 25: [+10] [+10] [5]

To check the edited contents
To clear the edited contents –49

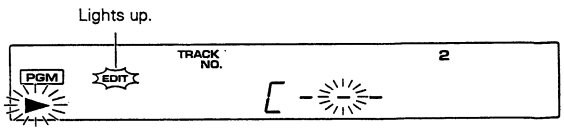
- The **REPEAT** key is invalid.

2 Light the "EDIT" indicator.

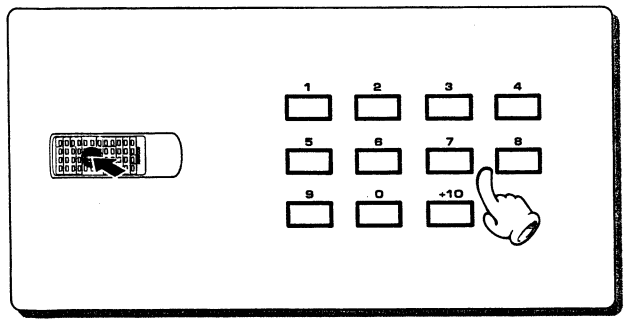


Go to step 3 within 8 seconds.

If more than 8 seconds have elapsed, press the key again.



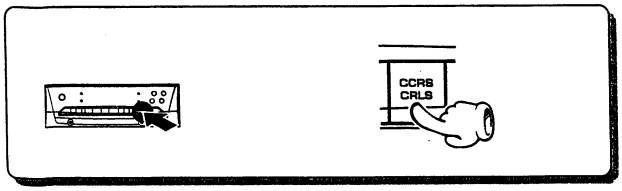
3 Enter the recording length of the tape.



Press the numeric keys as shown below...
30-minute tape: [+10] [+10] [+10] [0]
46-minute tape: [+10] [+10] [+10] [+10] [6]

- Up to 20 tracks can be edited.
- CD tracks will be edited automatically onto tape sides A and B. After editing, the **"EDIT"** indicator stops blinking and starts to light steadily.

4 Start edit recording.

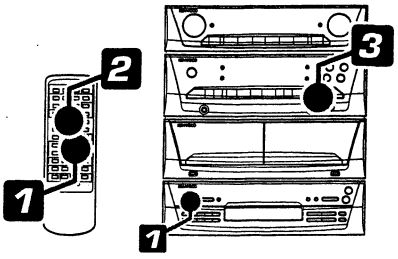


- The recording level will be adjusted automatically in approx. 90 seconds (variable depending on CD contents), after which recording starts.
- The tape and CD stop automatically when recording has completed.
- Depending on the contents of the CD (number and length of the tracks) and the recording time of the tape, some tracks may not be recorded.

Program edit recording

Use the following procedure to record CD tracks in the order programmed by yourself so that no tune is interrupted in the middle at the ends of tape sides.
The tune interrupted at the end of tape side A is erased and side B starts from the beginning of that tune.

M-49/M-29 only
For the operation of M-49M/M-29M: –50 to –53



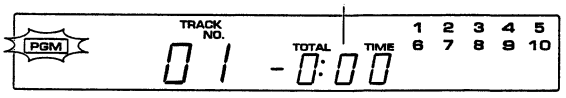
Preparation

–42

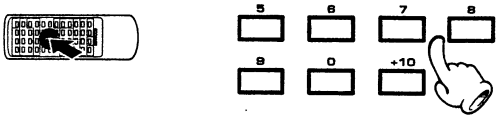
- Load a cassette tape in the deck B.
- Select the tape transport direction (◄ or ►).
- Select "⇄","⇉" (two-side recording).
- Select the Dolby NR mode.
- Select the **"CD"** input.
- Insert a disc in the CD player.

1 Press so that the "PGM" indicator lights.

Lights up. **"SINGLE TIME"** changes to **"TOTAL TIME"**.

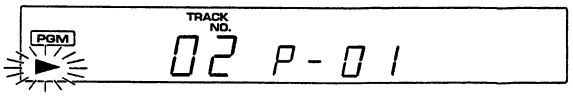


2 Enter CD track Nos. in the order you want to record them. (Editing)

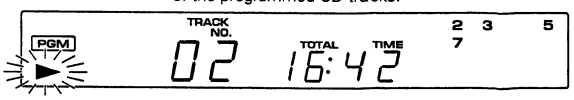


Press the numeric keys as shown below.
To enter track Nos. 2, 5 and 25: [2] [5] [+10] [+10] [5]

Displays the entered track No. for a few seconds.



Displays the total playing time of the programmed CD tracks.



To check the edited contents
To clear the edited contents –49

- Select CD tracks so that their total playing time does not exceed the recording time of the tape.
- Up to 20 tracks can be programmed. When "FULL" is displayed, no more tracks can be programmed.
- If you make a mistake, press the **CLEAR** key and enter the track No. from the beginning.
- Track numbers can also be selected while the tray is open.

3 Start edit recording.

- The recording level will be adjusted automatically in approx. 30 seconds (variable depending on CD contents), after which recording starts.

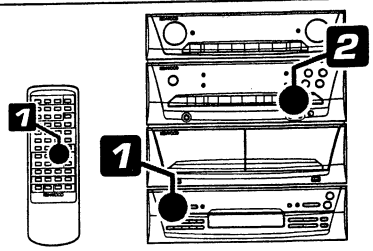
Notes

1. When the **CCRS** key is pressed during playback of CD, the playback stops and the CCRS setting (preparing edited recording) starts.
2. The automatic recording level setting operation in the edit recording utilizes a section suitable for this purpose in the CD present in the CD player.
3. Edit recording is not possible with CDs containing a track that is longer than one tape side, which may occur with classical music, etc.

Fade edit recording

The tune interrupted at the end of tape side A is faded out and side B starts with fading in from the middle of that tune. The tune interrupted at the end of tape side B is simply faded out.

M-49/M-29 only
For the operation of M-49M/M-29M: –50 to –53



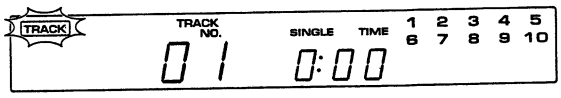
Preparation

–42

- Load a cassette tape in the deck B.
- Select the tape transport direction (◄ or ►).
- Select "⇄","⇄" (two-side recording).
- Select the Dolby NR mode.
- Select the **"CD"** input.
- Insert a disc in the CD player.

1 Check that the "TRACK" indicator lights.

Lights up.



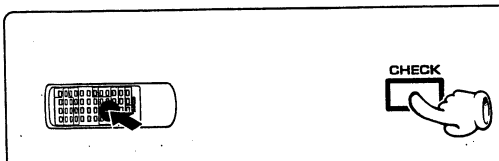
- If the **"PGM"** indicator is lit, press the **P.MODE** key.

2 Start edit recording.

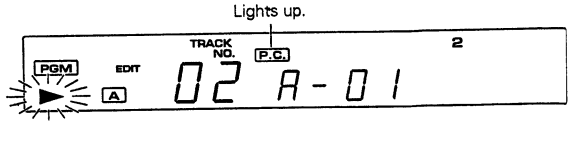
- The recording level will be adjusted automatically in approx. 90 seconds (variable depending on CD contents), after which recording starts.
- The CD tracks are recorded in the order they are recorded on the CD.
- The tape and CD stop automatically when recording has completed.

To check the edited contents

Timed edit recording and program edit recording only



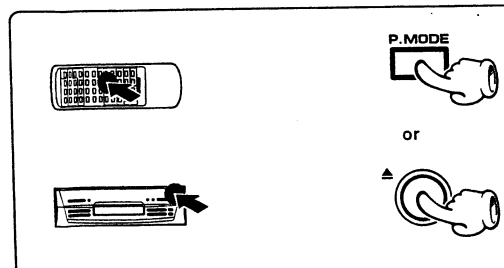
Lights up.



- Each time the key is pressed, the edited CD track Nos. are displayed in order.
- The **"P.C."** indicator goes off in a few seconds.

To clear the edited contents

Timed edit recording and program edit recording only



- The edited data is cleared entirely.

Notes

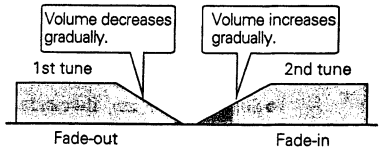
1. When the **CCRS** key is pressed during playback of CD, the playback stops and the CCRS setting (preparing edited recording) starts.
2. The automatic recording level setting operation in the edit recording utilizes a section suitable for this purpose in the CD present in the CD player.
3. When the last tune of tape side B is faded out, the ending part of the last but one tune may sometimes be faded out if the space between it and the last tune is short.

CD edit recording

M-49M/M-29M only
For the operation of M-49/M-29: –46 to –49

The system is capable of two types of edit recording which may be selected as follows:

Fade-in/fade-out



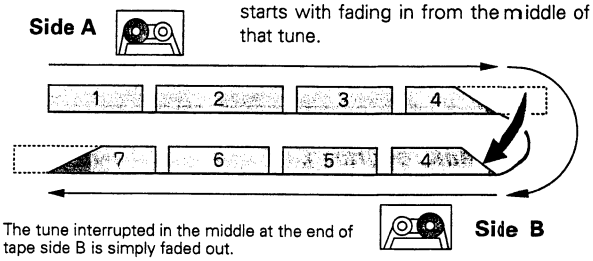
Fade-out : Ending a tune by gradually decreasing the volume.
Fade-in : Starting a tune by gradually increasing the volume.

Select the type of edit recording

When you want to record CD tracks sequentially from No. 1.

Fade edit recording –51

CD tracks are recorded in the order they are recorded. The tune interrupted at the end of tape side A is faded out and side B starts with fading in from the middle of that tune.



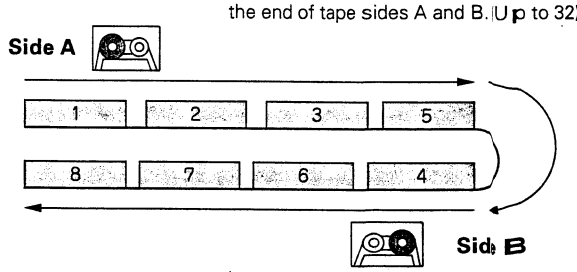
The tune interrupted in the middle at the end of tape side B is simply faded out.

- Depending on the disc type, the fade effect may be small.

When you want to record CD tracks within the specified tape length so that no track is interrupted in the middle.

Timed edit recording –52

The order of CD tracks are changed automatically so that no tune is interrupted at the end of tape sides A and B. (Up to 32)



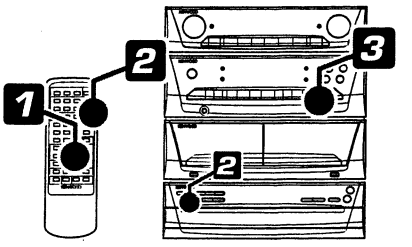
CCRS (Computer Controlled Recording System)

The CCRS allows you to record CD on tape with a one-touch operation.
When the CCRS key is pressed, the contents of CD are checked in approx. 90 seconds (variable depending on CD contents), the recording level is automatically set accordingly and recording starts. After the recording, it is also stopped automatically.
The edited data is cleared when the power is turned OFF or when the CD is stopped.

Fade edit recording

The tune interrupted at the end of tape side A is faded out and side B starts with fading in from the middle of that tune. The tune interrupted at the end of tape side B is simply faded out.

M-49M/M-29M only
For the operation of M-49/M-29: –46 to –49



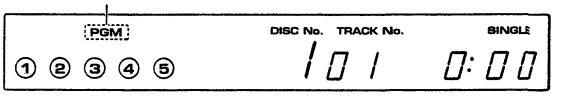
Preparation

–42

- Load a cassette tape in the deck B.
- Select the tape transport direction (◄ or ►).
- Select "⇄","⇉" (two-side recording).
- Select the Dolby NR mode.
- Select the **"CD"** input.
- Insert a disc in the CD player.

1 Press so that the "PGM" indicator goes off.

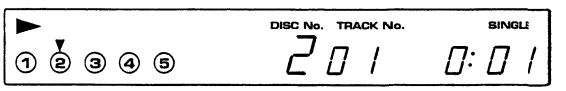
Goes off.



- If the **"PGM"** indicator is lit, press the **P.MODE** key.

2 Select the disc.

Selected disc No.



3 Start edit recording.

- The recording level will be adjusted automatically in approx. 90 seconds (variable depending on CD contents), after which recording starts.
- The CD tracks are recorded in the order they are recorded on the CD.
- The tape and CD stop automatically when recording has completed.

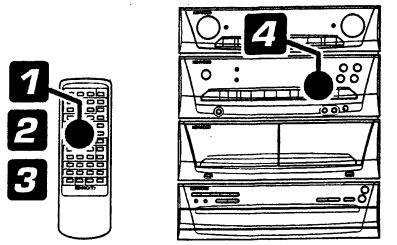
Notes

1. When the **CCRS** key is pressed during playback of CD, the playback stops and the CCRS setting (preparing edited recording) starts.
2. The automatic recording level setting operation in the edit recording utilizes a section suitable for this purpose in the CD present in the CD player.
3. When the last tune of tape side B is faded out, the ending part of the last but one tune may sometimes be faded out if the space between it and the last tune is short.

Timed edit recording

By specifying the recording time of the tape used, CD tracks can be recorded with their order automatically changed so that no tune is interrupted at the end of tape sides A and B.

M-49M/M-29M only
For the operation of M-49/M-29: –46 to –49

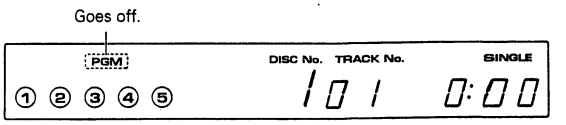


Preparation

–42

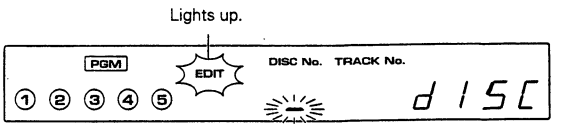
- Load a cassette tape in the deck B.
- Select the tape transport direction (◄ or ►).
- Select "⇄","⇉" (two-side recording).
- Select the Dolby NR mode.
- Select the **"CD"** input.
- Insert a disc in the CD player.

1 Press so that the "PGM" indicator goes off.



- If the **"PGM"** indicator is lit, press the **P.MODE** key.

2 Light the "EDIT" indicator.



Go to step 3 within 8 seconds.

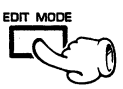
If more than 8 seconds have elapsed, press the key again.

3 Enter the disc and tape conditions.

❶ Enter the disc No.

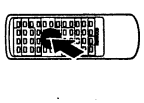
Within 8 seconds !

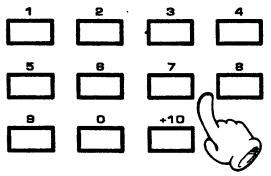
❷ Press the EDIT MODE key.

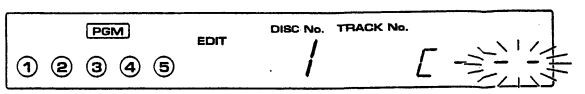


Within 8 seconds !

❸ Enter the recording length of the tape.





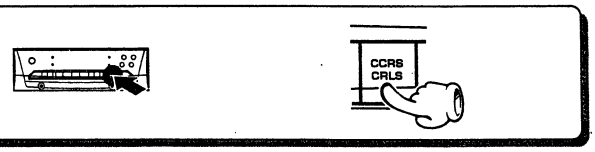


Press the numeric keys as shown below.
30-minute tape: [+10] [+10] [+10] [0]
46-minute tape: [+10] [+10] [+10] [+10] [6]

46-, 54-, 60- or 90-minute tapes can be selected simply by pressing the **TIME** key for the required number of times. (The recording time can be adjusted in 1-minute steps with the ⏮ and ⏭ keys.)
After entry, press the **EDIT MODE** key then proceed to step 4.

- Up to 32 tracks can be edited.
- CD tracks will be edited automatically onto tape sides A and B. After editing, the **"EDIT"** indicator stops blinking and starts to light steadily.

4 Start edit recording.

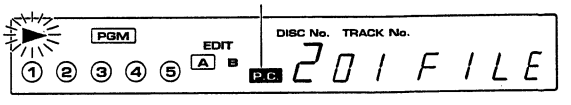


- The recording level will be adjusted automatically in approx. 90 seconds (variable depending on CD contents), after which recording starts.
- The tape and CD stop automatically when recording has completed.
- Depending on the contents of the CD (number and length of the tracks) and the recording time of the tape, some tracks may not be recorded.

M-49M/M-29M only
For the operation of M-49/M-29: –46 to –49

To check the edited contents

Lights up.



- When the **CHECK** key is pressed, the track Nos. of edited songs will automatically be displayed in the order they are edited.
- The **"P.C."** indicator goes off in a few seconds.

To clear the edited contents

Method: 1

Method: 2

Stop mode only

- The edited data is cleared entirely.

Tone adjustment

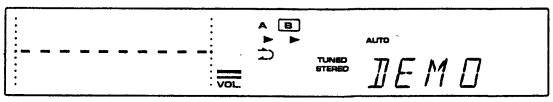
The system allows you to select 5 kinds of preset equalizer patterns or 4 kinds of presence (sound field) modes. Select preset equalizer patterns according to the genre of music and select the presence modes according to the acoustic ambience required. →55

Demonstration

This feature applies various tone adjustment effects of the preset equalizer and presence sound fields in sequence with the sound. The display also changes as the applied effects change. Check out the tone adjustment effects both visually and aurally.

❶ Play some music.

❷ Select "DEMO".



Display characters scroll from the right to the left.

Each press changes the display as follows.

→ ① Equalizer display
② Spectrum analyzer display
└ ③ Demonstration display

To cancel demonstration

Press the EQ.DISPLAY key again.

Switching the displayed contents

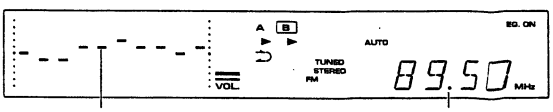
Equalizer display:
Shows how the frequency bands are compensated for.

Spectrum analyzer display:
Shows the levels of frequency bands that vary according to the progress of sound.

Demonstration display:
The equalizer curves change one after another.

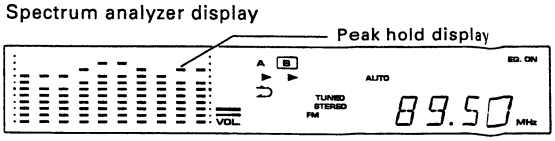
Each press changes the display contents as follows.

→ ① Equalizer display



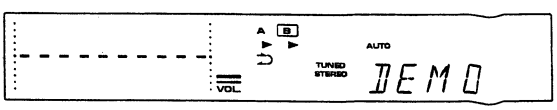
● The display will change when the **EQ.EFFECT** or **PRESENCE** key is pressed.

② Spectrum analyzer display



● The Peak Hold display can be extinguished by pressing the PEAK HOLD key when the spectrum analyzer is being displayed.
(M-29/M-29M: For U.K., Europe and Australia only) →23

└ ③ Demonstration display



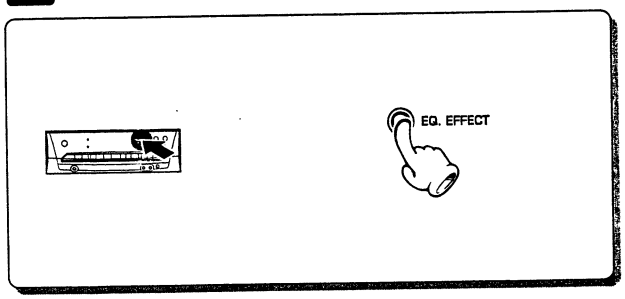
Display characters scroll from the right to the left.

Playing music with the desired tone

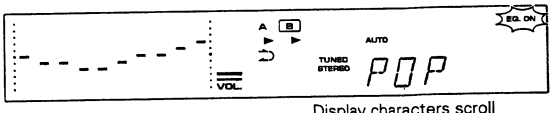
The preset equalizer patterns can be selected according to the genre of music played.

1 ***Play the desired music.***

2 ***Select the music category.***



Lights up.



Display characters scroll from the right to the left.

- Select the category according to the genre or contents of the music played.

Select by pressing repeatedly.

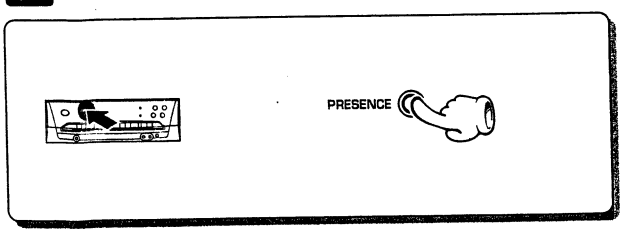
- ① POP (Popular)
- ② ROCK (Rock)
- ③ JAZZ (Jazz)
- ④ CLASSIC (Classic)
- ⑤ MOVIE (Movie)
- ⑥ EQ. OFF (Equalizer OFF)

Enjoying music with the presence effect (presence modes)

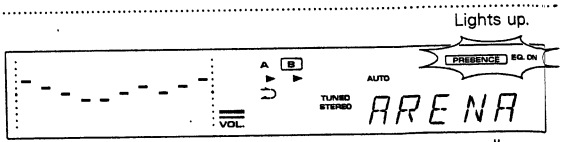
The presence (sound field) mode can be selected according to the music played and to your liking. The presence effect applied to the sound can be recorded together with the sound.

1 ***Play a desired music.***

2 ***Select a presence sound field.***



Lights up.



Display characters scroll from the right to the left.

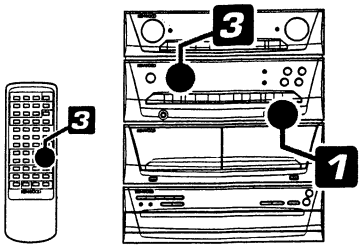
- Select the category according to the genre or contents of the music played.

Select by pressing repeatedly.

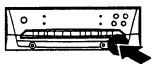
- ① ARENA: Reproduction of a live feeling as if the listener is in the first row of the arena seat.
- ② JAZZ CLUB: Reproduction of a jazz live house where cymbals resound.
- ③ STADIUM: Reproduction of an open atmosphere with little reverberations which are usually reflected from the ceiling.
- ④ HIT MASTER: (Vocal canceller) For use in Karaoke singing. **(Except for U.K., Europe and Australia)**
- ⑤ PRESENCE OFF: (Presence OFF)

Easy Karaoke singing (For U.K., Europe and Australia)

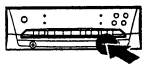
Discs and tapes designated for Karaoke use can be played back, and Karaoke can be easily enjoyed.



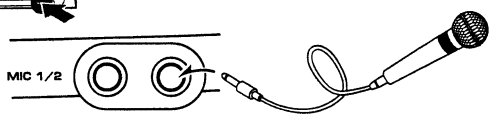
1 Connect a microphone.

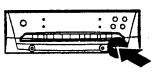


❶ **Turn the MIC MIXING control fully counterclockwise.**



❷ **Plug the microphone into one of the MIC jacks.**





❸ **Adjust the volume balance between the music input and microphone input.**

To decrease microphone volume

To increase microphone volume

- Use a microphone equipped with a standard phone plug.
- Set the **MIC MIXING** control to the fully counterclockwise position when the microphone is not used.

2 Play the music.

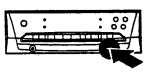
Playback a Karaoke disc or tape.

3 Sing along with the accompainiment.

- Adjust the overall volume with the **VOLUME CONTROL** knob.

To record Karaoke singing

Tape recording can be performed as you sing.



❶ **Perform the procedure above until step 3.**

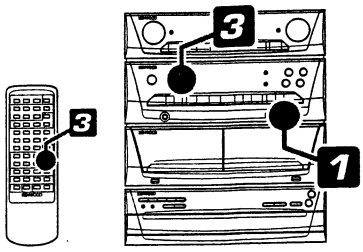
❷ **Start recording.**

→43

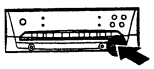
During Karaoke singing using the song recorded on a tape, the Karaoke sound cannot be recorded.

Easy Karaoke singing (For other countries)

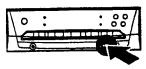
Even the tape or disc is not a special Karaoke type, Karaoke can be enjoyed by using the HIT MASTER function.



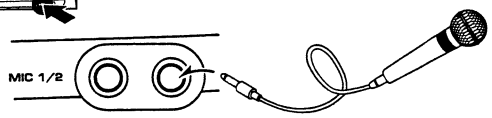
1 Connect a microphone.



❶ **Turn the MIC MIXING control fully counterclockwise.**



❷ **Plug the microphone into one of the MIC jacks.**



❸ **Adjust the volume balance between the music input and microphone input.**

To decrease microphone volume

To increase microphone volume

- Use a microphone equipped with a standard phone plug.
- Set the **MIC MIXING** control to the fully counterclockwise position when the microphone is not used.

2 Play the music.

Playback a Karaoke disc or tape.

- The HIT MASTER function can be used only if there is a normal vocal input music source.

3 Sing along with the accompainiment.

- Adjust the overall volume with the **VOLUME CONTROL** knob.

To record Karaoke singing

Tape recording can be performed as you sing.

❶ **Perform the procedure above until step 3.**

❷ **Start recording.**

→43

During Karaoke singing using the song recorded on a tape, the Karaoke sound cannot be recorded.

The HIT MASTER Function

This function enables a vocal input musical source to be enjoyed as an artificial Karaoke musical source.

- The volume of the vocal parts of the song decreases. However, this effect may not be clear with some songs and discs.
- A Karaoke tape can be created by recording the performance while the **MIC MIXING** control is in the fully counterclockwise position.

Select by pressing "HIT MASTER" repeatedly.

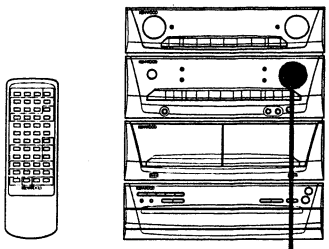
- ① ARENA
- ② JAZZ CLUB
- ③ STADIUM
- ④ HIT MASTER
- ⑤ PRESENCE OFF (Presence OFF)

Lights up.

HIT MASTER display

Presence effects (M-49/M-49M only)

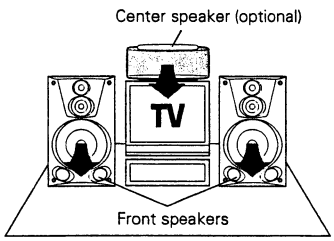
Various modes for reproducing the effects of presence are available. Select the mode according to the played source or the component in your system.



DOLBY 3 STEREO mode

–59

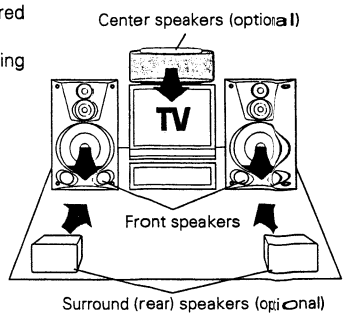
This mode can be used with video software programs recorded with ordinary stereo audio. It improves the acoustic image positioning of words, etc., by applying a processing called directional enhancement and using a center speaker.



DOLBY PRO LOGIC SURROUND mode

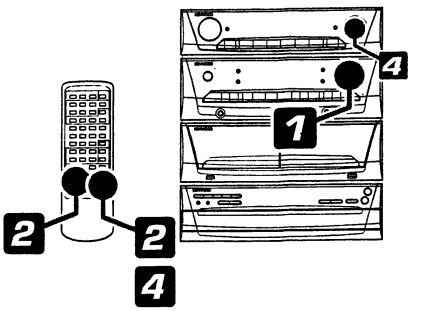
–60

When a videotape or LD software program carrying DOLBY SURROUND mark is played in this mode, the Dolby Surround effect, similar to movie theaters can be enjoyed with full of presence.
The use of surround (rear) speakers (optional) is required when using this mode.
The presence effect can be further improved by connecting the center speaker (optional).

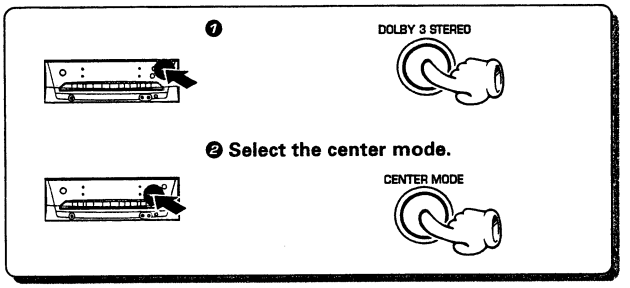


Adjustment and playback of DOLBY 3 STEREO
(M-49/M-49M only)

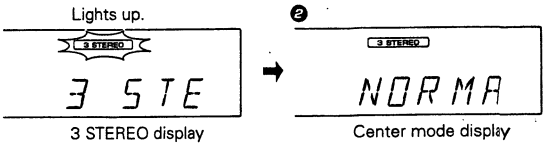
The Dolby 3 STEREO provides an active center channel to produce a better, stable center image. This mode can be used when listening to stereo video program and music.



1 Set the Dolby 3 STEREO mode.



❶ Lights up.

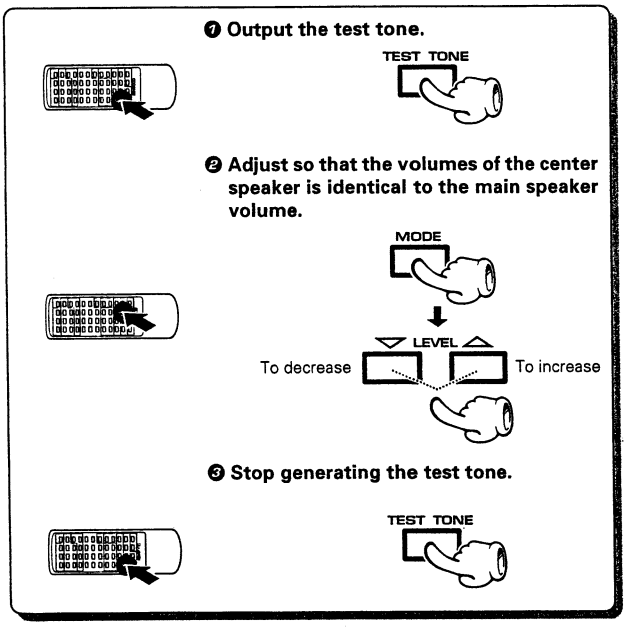


Each press changes the center modes as follows.

① NORMAL : When the center speaker is compact-sized.
② WIDE BAND : When the center speaker is medium-or large-sized.

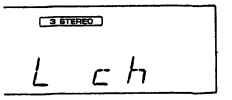
- If you cannot tell whether your center speaker is of the compact or medium size, try both modes and use the one that you like.
- Once the center mode is selected, it is automatically held in memory and will not change until it is set again.

2 Adjust the volume balance.


❶ Output the test tone.
TEST TONE
❷ Adjust so that the volumes of the center speaker is identical to the main speaker volume.
MODE
LEVEL
To decrease
To increase
❸ Stop generating the test tone.
TEST TONE

- Noise-like test tone moves across the speakers every 1.5 second.

① L ch (Left)
② C ch (Center)
③ R ch (Right)



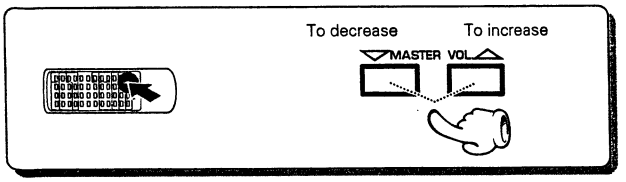
To adjust center level

Operate the **LEVEL** key while the "**CENTER**" indicator is illuminated.

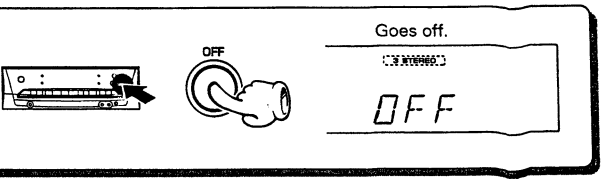
- Be sure to adjust from the listening position.
- When one of the **LEVEL** keys is pressed, the current volume level is displayed. While the level is displayed, it can be adjusted in 1 dB steps every time one of the keys is pressed.
- The volume level can be adjusted in the range from -10 to +10 dB.
- The center level is stored in memory as the common setting with the DOLBY PRO LOGIC SURROUND mode.

3 Play a video software program.

4 Adjust the listening volume.

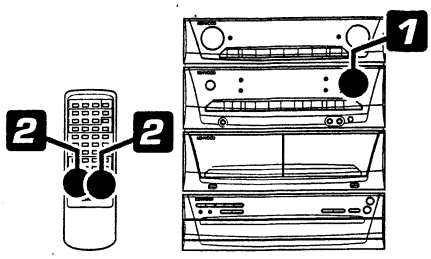


To cancel DOLBY 3 STEREO play

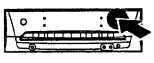


Dolby Pro Logic Surround adjustment (M-49/M-49M only)

When video (LD) software carrying DOLBY SURROUND mark is played, this mode provides the Dolby Surround effect, similar to movie theaters.

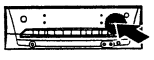


1 Switch DOLBY PRO LOGIC ON.



❶ DOLBY PRO LOGIC

❷ **Select the center mode.**



CENTER MODE

❶ Lights up.

PRO LOGIC display

❷

Center mode display

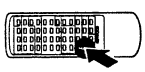
Each press changes the center modes as follows.

- ① NORMAL : When the center speaker is compact-sized.
- ② WIDE BAND : When the center speaker is medium-or large-sized.
- ③ PHANTOM : When the center speaker is not used.

- If you cannot tell whether your center speaker is of the compact or medium size, try both modes and use the one that you like.
- Once the center mode is selected, it is automatically held in memory and will not change until it is set again.

2 Adjust the volume balance.

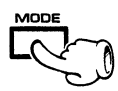
❶ **Output the test tone.**



TEST TONE

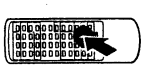
❷ **Select either "CENTER" or "REAR."**

MODE

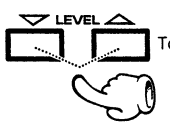


To adjust the center level:
Illuminate the "**CENTER**" indicator.
To adjust the rear level:
Illuminate the "**REAR**" indicator.

❸ **Adjust so that the volumes of the center and rear speakers are identical to the main speaker volume.**



To decrease



To increase

❹ **Stop the test tone.**

TEST TONE

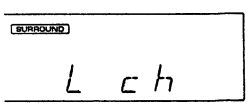
- Noise-like test tone moves across the speakers every 1.5 second.

In NORMAL or WIDE BAND mode:

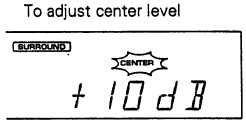
- ① L ch (Left)
- ② C ch (Center)
- ③ R ch (Right)
- ④ S ch (Surround) (Rear)

In PHANTOM mode:

- ① L ch (Left)
- ② R ch (Right)
- ③ S ch (Surround) (Rear)

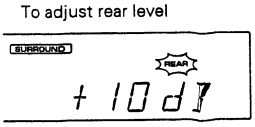


To adjust center level



Operate the **LEVEL** key while the "**CENTER**" indicator is illuminated.

To adjust rear level

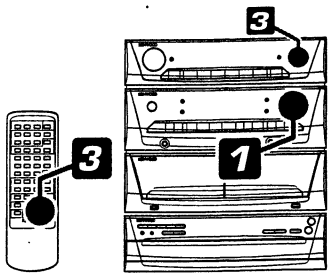


Operate the **LEVEL** key while the "**REAR**" indicator is illuminated.

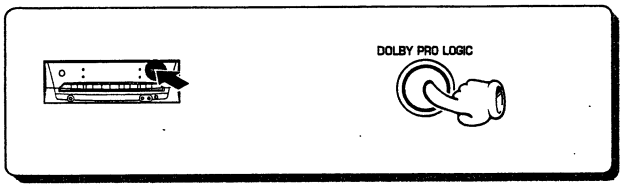
- Be sure to adjust from the listening position.
- When one of the **LEVEL** keys is pressed, the current volume level is displayed. While the level is displayed, it can be adjusted in 1 dB steps every time one of the keys is pressed.
- The volume level can be adjusted in the range from -10 to +10 dB.
- The center level is stored in memory as the common setting with the DOLBY 3 STEREO mode.

Dolby Pro Logic Surround play (M-49/M-49M only)

Before using the Dolby Surround mode, be sure to perform the "Dolby Pro Logic Surround adjustment" procedure. –60



1 Switch DOLBY PRO LOGIC ON.

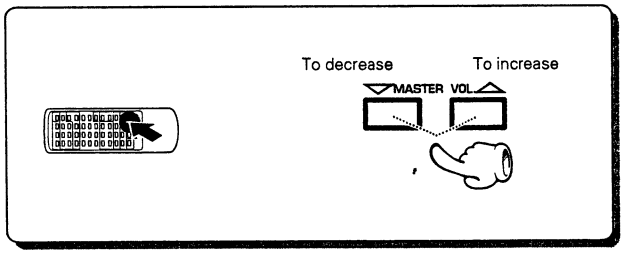


Lights up.

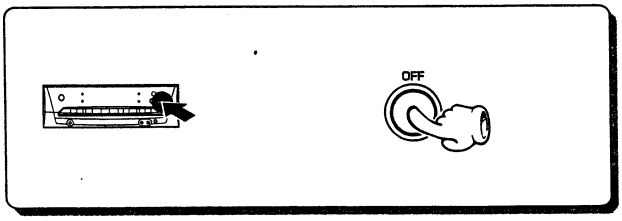
- The previously adjusted center mode will be called up. –60

2 Play video or LD software.

3 Adjust the volume.



To cancel DOLBY SURROUND play



Goes off.

Timer operation

Adjust the clock before setting the timer. –19

Two 24-hour timer systems (PROG.1, PROG.2) (which can be used every day) and a sleep timer system (which works only once) are available.
In each of PROG.1 and PROG.2, the timer data including the operating period and played contents can be set and selected to be activated or not as required.

Timer reservation is possible for the two types PROG.1 and PROG.2 at the same time.
- Please make reservations with an interval of at least one minute, so that the operation times of PROG.1 and PROG.2 do not overlap.

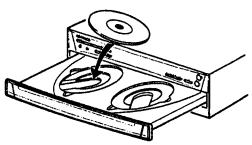
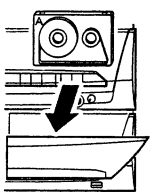
Timer playback, timer recording (PROG.1, PROG.2)
With each of the two timer programs, a selected source can be played (or radio broadcast can be recorded) in the previously set time period.

AI timer playback (PROG.1, PROG.2)
When timer playback starts, the volume increases gradually.

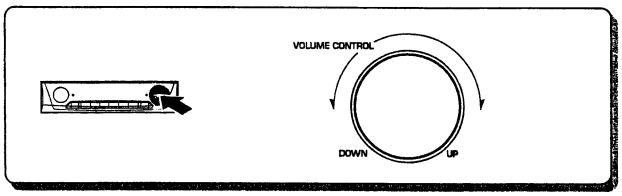
Sleep timer
The power is turned OFF automatically after the specified period has elapsed. –64

Timer programming

1 Make preparations for the play (recording).

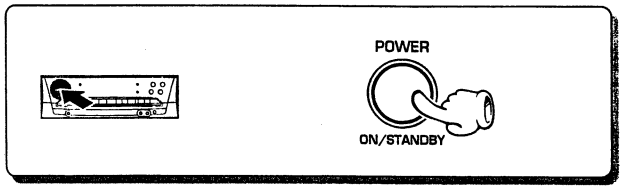
●To listen to radio	●To listen to CD	●To listen to tape	●Playing the auxiliary input source	●For broadcast recordings
The station should be preset before timer programming. –41	**Insert a disc.** (Program playback is not possible.)  Select the disc to be played. (M-49M/M-29M only)	**Insert a tape.**  If tapes are inserted in both decks A and B, playback starts with the tape in deck B.	**Set the timer for the component connected to the AUX terminal such as DBS tuner.** Select "AV AUX" with the input selector key.	**Make preparations for recording.** –42

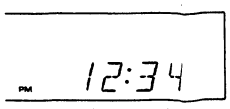
2 Adjust the listening volume.



- When recording a broadcast, the listening volume is automatically set to the minimum at the moment the power is turned ON by the timer.

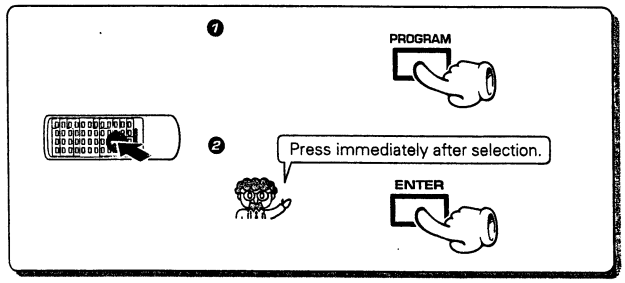
3 Set the POWER switch to OFF (STANDBY) position.





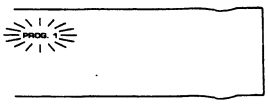
Clock display

4 Select a program No.



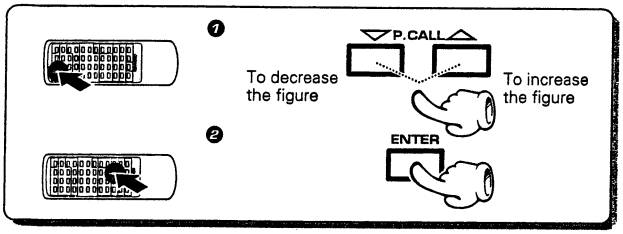
Each press of the key switches the program numbers as follows.

① **PROG.1** (Program 1)
② **PROG.2** (Program 2)
③ Normal operation

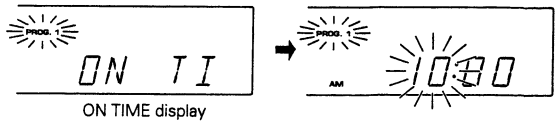


- The selected program No. lights.
- If a previously programmed Program No. is selected, the contents will be replaced by the new contents programmed.

5 Enter the ON time.



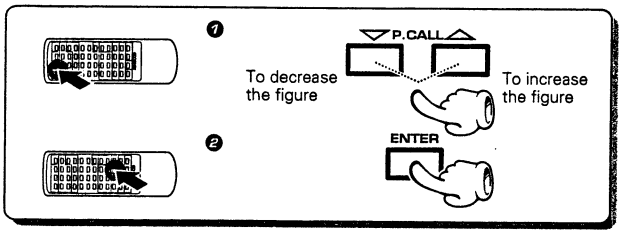
- After entering the figure of "hour" with the procedure in ❶ an ❷, enter the figure of "minute" using the same procedure.



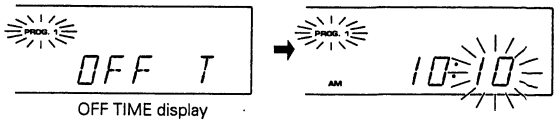
ON TIME display

- If you make a mistake, restart from step 4.

6 Enter the OFF time.



- After entering the figure of "hour" with the procedure in ❶ an ❷, enter the figure of "minute" using the same procedure.



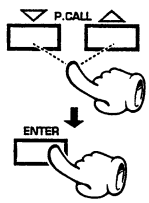
OFF TIME display

- If you make a mistake, restart from step 4.

7 Make the desired reservation.

For timer playback or AI timer playback

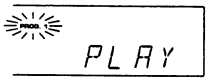
❶ Select the mode.



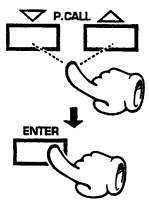
Select "PLAY" or "AI".
(Each press alternates them.)

- PLAY : At the ON time, playback starts.
- REC
- AI : At the ON time, playback starts and its volume increases gradually.

Enter it.



❷ Select the input source.

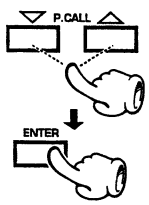


Select the source to be played.
(Each press switches the following).

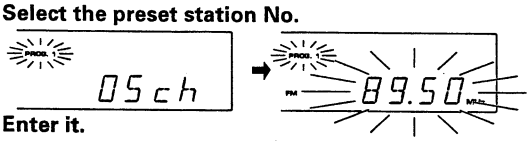
- TUNER (Radio)
- CD
- TAPE (Tape)
- LAST (Select "LAST" to listen to the input source (DBS tuner etc.) connected to the AUX terminal. Step ❸ can be omitted.)

Enter it.

❸ Select the broadcast station (only when TUNER is selected above).



Select the preset station No.

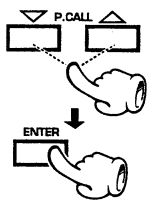


Enter it.

- The station to be received with timer must be preset beforehand. –41

Timer recording of broadcasts

❶ Select the mode.

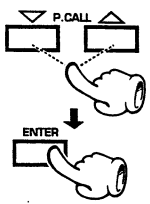


Select "REC".
(Each press alternates them.)

- PLAY
- REC
- AI

Enter it.

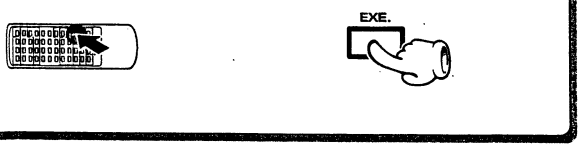
❷ Select the broadcast station.



Select the preset station No.

Enter it.

8 Select the timer program No. to be used.



Each press of the key switches the program numbers as follows.

- ① **PROG.1** ..... Execution of program 1 only.
- ② **PROG.2** ..... Execution of program 2 only.
- ③ **PROG.1, 2** .. Execution of programs 1 and 2.
- ④ Timer OFF

- The selected program No. lights.
- The timer will not function unless a program No. is selected.

Note

The reservation contents cannot be cleared. The contents are cleared only when they are changed.

Check the reservation content.

Preparation

- POWER → ON
- Input selector → "TUNER"

Select the program number to be checked.

Each press of the key switches the program numbers as follows.

① **PROG.1** (Contents of the program 1 are displayed.)
② **PROG.2** (Contents of the program 2 are displayed.)
③ Normal mode

- The reserved contents will be displayed for 3 seconds per item. After this, the previous display content appears again.

To change the reserved contents

Restart the procedure of "Timer programming" from the beginning.

When timer operation is not required

Press so that all PROG. indicators are OFF.

Each press of the key switches the program numbers as follows.

① **PROG.1** (Only the program 1 is carried out.)
② **PROG.2** (Only the program 2 is carried out.)
③ **PROG.1,2** (Both programs 1 and 2 are carried out.)
④ Timer OFF (No timer operation is carried out)

- The reservation contents are held in memory.

To set the same timer program again

Press so that the desired PROG. indicators lights.

Each press of the key switches the program numbers as follows.

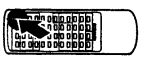
① **PROG.1** (Only the program 1 is carried out.)
② **PROG.2** (Only the program 2 is carried out.)
③ **PROG.1,2** (Both programs 1 and 2 are carried out.)
④ Timer OFF (No timer operation is carried out)

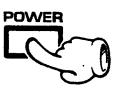
- Also prepare the disc or tape and adjust the listening volume.

Sleep timer

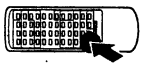
Set the number of minutes after which the power is to be turned OFF.

❶ Turn the power ON.





❷ Set the time.

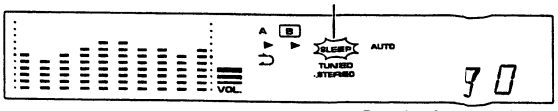


- The power is turned OFF automatically after the set time has elapsed.

- Each press decreases the time by 10 minutes. The maximum time that can be set is 90 minutes.

90→80→70...30→20→10→Cancel→90→80...

Lights up.



Duration for sleep timer.

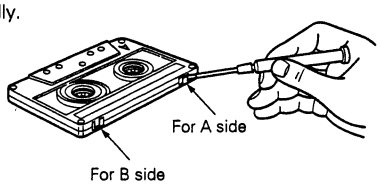
To cancel

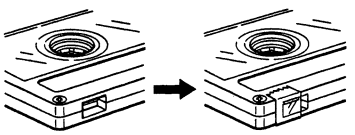
Turn the power OFF or press the SLEEP key until the sleep time is cancelled.

Maintenance

Notes on cassette tape

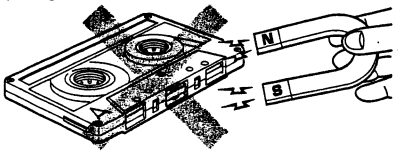
Safety tab (accidental erasure prevention tab)
After an important recording has been finished, break the safety tab, to prevent the recorded contents from being erased or recorded on accidentally.



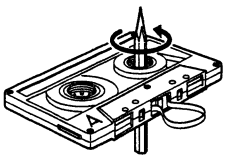


To re-record Apply tape only to the position where the tab has been removed.

To store cassette tapes
Do not store the tapes in a place which is subject to direct sunlight, or near equipment that generates heat. Keep the cassette tapes away from any magnetic field.



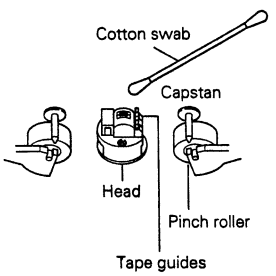
When there is slack in the tape
In such a case, insert a pencil into the reel hole and wind the reel hub to remove the slack.



Notes

1. 120-minute cassette tape
   Since a 120-minute cassette tape is very thin, the tape could adhere to the pinch roller or be easily broken. It is recommended that these tapes not be used with this unit to prevent possible damage.
2. Endless tapes
   Do not use an endless tape, as this could damage the mechanism of the unit.

Cleaning the head section



Cleaning the heads and peripheral components
For maintaining the best condition of the deck and for longer service life, always keep the heads (recording / playback / erase), capstan and pinch roller clean. To clean them, perform the following:

1. Open the cassette holder.
2. Using a cotton swab dipped in alcohol, clean the head (recording / playback / erase), capstan and pinch roller carefully.

Demagnetizing the head
When the recording / playback head is magnetized, the sound quality will deteriorate. In such a case, demagnetize the head using a commercially available demagnetizer (head eraser).

Note

There are precisely aligned parts around the heads, including the tape guides. When cleaning, pay special attention so as not to apply shock to them.

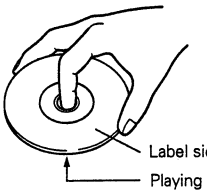
Beware of condensation

When water vapor comes into contact with the surface of a cold material, condensation is produced.
If condensation occurs, correct operation may not be possible, or the unit may not function correctly.
This is not a malfunction, however, and the unit should be dried-out. (To do this, turn the POWER switch ON and leave the unit as it is for several hours.)

Be especially careful in the following conditions:

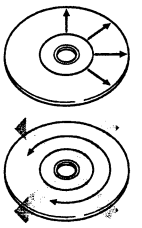
- When the unit is brought from a cold place to a warm place, and there is a large temperature difference.
- When a heater starts operating.
- When the unit is brought from an air-conditioned place to a place of high temperature with high humidity.
- When there is a large difference between the internal temperature of the unit and the ambient temperature, or in conditions where condensation occurs easily.

Disc handling precautions

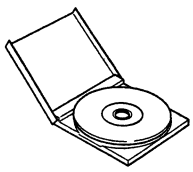


Handling
Hold compact discs so that you do not touch the playing surface.

Do not attach paper or tape to either the playing side or the label side of compact discs.

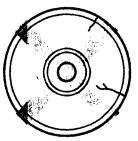


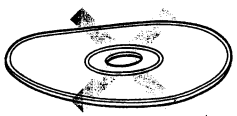
Cleaning
If fingerprints or foreign matter become attached to the disc, lightly wipe the disc with a soft cotton cloth (or similar) from the center of the disc outwards in a radial manner.



Storage
When a disc is not to be played for a long period of time, remove it from the CD player and store it in its case.

Caution on disc used





Never play cracked or warped disc.
During playback, the disc rotates at high speed in the player. Therefore, to avoid malfunction, never use a cracked or deformed disc or a disc repaired with tape or adhesive agent.

Discs which can be played with this unit

CD (12 cm, 8 cm), CDV (only the audio part)
- With CD-G (CD Graphics) discs, this unit can play only the audio.

Dolby noise reduction manufactured under license form Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

When your unit needs to be repaired, bring the entire set (Speakers excluded) to your dealer.

WARNING NOTICE:

IN MOST CASES IT IS AN INFRINGEMENT OF COPYRIGHT TO MAKE COPIES OF TAPES OR DISCS WITHOUT THE PERMISSION OF THE COPYRIGHT OWNERS. ANYONE WISHING TO COPY COMMERCIALLY AVAILABLE TAPES OR DISC SHOULD CONTACT THE MECHANICAL COPYRIGHT PROTECTION SOCIETY LIMITED OR THE PERFORMING RIGHTS SOCIETY LIMITED.

M-49/M-49M

Manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Memory backup function

When the power plug is connected to an AC outlet, memory backup is executed for the following setting contents.

Clock display

POWER status (ON or OFF)

Amplifier unit
- Surround
- Equalizer

Tuner unit
- Receiving band
- Frequency
- Preset stations
- Program settings

Cassette deck unit
- Transport direction
- DOLBY NR
- Reverse mode
- A/B deck selection

Caution :
The time display blinks after a power failure or when the power cord has been unplugged from the AC outlet and plugged in again. In such a case, adjust the clock again.(When the other preset memory contents are lost, please enter them again.)

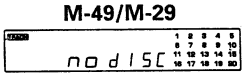
Note related to transportation and movement (CD player)

Before transporting or moving this unit, carry out the following operations.

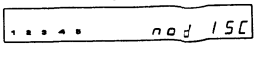
1. Turn the power ON but do not load a disc.
- Press the ▶/II key to check that no disc is present on the tray.

2. Wait a few seconds and verify that the displays shown appears.

M-49/M-29



M-49M/M-29M



3. Turn the power OFF.

In case of difficulty

Operation to reset

The microcomputer may fall into malfunction (impossibility to operate erroneous display, etc.) when the power cord is unplugged while power is ON or due to an external factor. In this case, execute the following procedure to reset the microcomputer and return it to normal condition.

Amplifier unit : Unplug the power cord from the power socket and, while holding the TUNER key, plug the power cord into the socket again.

- Please note that resetting the microcomputer clears the contents stored in it returns it to the condition when it left the factory.

Amplifier unit, speakers

Symptom	Cause	Remedy
Sound is not produced.	• The speaker cords are disconnected. • The volume control is set to the minimum position. • The **MUTE** switch of remote control unit is switched ON. • The headphone plug is inserted into the jack. • The connection cord is disconnected.	• Connect properly referring to "System connections". • Adjust to an required volume. • Switch **MUTE** OFF. →21 →23 • Unplug the headphone plug. • Check the connection of the connection cord. →6 →7
"PROTECT" is displayed and sound is not produced.	• The speaker cords are short-circuited.	• Unplug the power cord from the power socket, remove the short-circuit and plug it in again.
Sound is not produced through headphones	• The headphone plug is not inserted fully.	• Insert it into the plug. →20 →22
Sound is not produced from the left or right speakers.	• The speaker cords are disconnected. • The BALANCE is set completely to the left or right channel.	• Connect properly referring to "System connections". • Adjust the optimum left and right balance. →21 →23
Sound is not produced from the surround (rear) speakers or center speaker or their volume is very low. (M-49/M-49M only)	• The rear or center speaker cords are disconnected. • The surround play mode is not activated. • The rear level or center level is set to the minimum volume.	• Connect properly referring to "System connections". • Activate a surround mode. • Adjust the rear level or center level. →60

Tuner unit (Multi command unit)

Symptom	Cause	Remedy
The clock display blinks without changing the figures.	• There was a power failure. • The power cord was unplugged from the outlet.	• Adjust the present time again. →19 • Adjust the present time again.
Timer operation is not possible.	• The present time has not been adjusted or there was a power failure. • The timer ON time and OFF time have not been set. • The timer execution was not set up.	• Adjust the present time referring to "Clock adjustment". • Set the timer ON time and OFF time. • Press the **EXE.** key to set up the execution. →63
Radio stations cannot be received.	• The antennas have not been connected. • A proper broadcasting band has not been selected. • The frequency of the station to be received is not tuned.	• Connect antennas. →9 • Select a band. →40 • Tune to the frequency of the desired station.
Noise interferes.	• Car ignition noise. • Influence of an electric appliance. • A TV set is installed near the system.	• Install the outdoor antenna in an apart position from the road. • Switch the suspected electric appliance OFF. • Install the TV or the system at an increased distance between them.
A station has been preset but it cannot be received by pressing the P.CALL key.	• The frequency of the preset station is not tunable. • The preset memory has been cleared because the power cord has been unplugged for a long period.	• Preset stations with tunable frequencies. • Preset stations again. →41

Cassette deck unit (Multi command unit)

Symptom	Cause	Remedy
Sound cannot be produced by pressing the play key or no operation occurs even when an operation key is pressed.	● The connections cords are wrong. ● The head is dirty. ● The tape is wound too tight due to irregular winding. ● A nonrecorded tape is played.	● Connect properly referring to "System connections". ● Clean the head referring to "Maintenance". →65 ● Try another tape. ● Play a recorded tape.
No operation occurs even when an operation key is pressed.	● The cassette holder is not closed completely. ● The operation key is pressed immediately after closing the cassette holder. ● The operation key is pressed in less than 4 seconds after turning the power ON. ● A tape is not inserted in the unit. ● The tape is wound too tight due to irregular winding. ● The tape is fully wound to one of the reels.	● Close the holder completely. ● Press operations keys in more than a few seconds after closing the holder. ● Press operation keys after waiting for more than 4 seconds. ● Insert a tape. ● Try another tape. ● Change the tape transport direction or reverse the tape insertion orientation.
The DPSS malfunctions.	● The tape used is not suitable for DPSS, for example the spaces between tunes may be too short.	● Refer to "Skip search". →38
The CCRS does not function.	● A recordable tape is not present in deck B. ● A disc is not present in the CD player. ● The disc is dirty. ● The input selector is not switched to CD.	● Insert a recordable tape in deck B and retry operation. ● Place a disc in the CD player and retry operation. ● Clean the disc, place it in the CD player and try the operation again. →66 ● Switch input selector to CD.
In dubbing, the tape stops at different moments in decks A and B.	● This is due to the difference in the tape length or characteristics of the mechanisms of two cassette decks.	● Small time difference does not mean a malfunction.
The cassette holder cannot be opened by pressing the eject key.	● The key is pressed during recording or playback.	● Press in stop mode.
Sound is harsh or high frequencies are not reproduced.	● The head is dirty. ● The tape is stretched or shrunk.	● Clean the head referring to "Maintenance". →65 ● Try another tape.
Sound is distorted.	● The tape being played was recorded with distorted sound.	● Try another tape.
Noise is noticeable.	● The tape head is magnetized. ● External noise is induced. ● A tape recorded with Dolby NR ON is played with Dolby NR OFF.	● Demagnetize the head referring to "Maintenance". →65 ● Install the system at a distance from other electric appliances and TV. ● Set the Dolby NR to on. →36
Sound vibrates.	● The capstans or pinch rollers are dirty. ● The tape is wound irregularly.	● Clean the head referring to "Maintenance". →65 ● Wind the tape again by fast forwarding, rewinding or playing from an end to the other.
Recording cannot be started by pressing the REC/ARM key.	● The recording protect tab of the cassette has been broken. ● The cassette holder is not closed completely. ● The **TAPE** input is selected. ● The tape is fully wound to one of the reels.	● Use a cassette with an unbroken recording protect tab or block the hole. ● Close the holder completely. ● Select the source to be recorded with the input selector key. ● Change the tape transport direction of deck B or reverse the tape insertion orientation.
Volume of the recorded track is changed.	● **MIC MIXING** control knob is moved during recording.	● Do not turn the control during recording.

CD player unit

Symptom	Cause	Remedy
A CD is placed in the player but it cannot be played.	● The disc is placed upside down. ● The disc position is displaced. ● The disc is extremely dirty. ● The disc is scratched. ● Dew is condensed on the optics lens.	● Place the disc properly, with the label side facing upward. ● Place the disc properly. ● Clean the disc referring to "Disc handling precautions". →66 ● Try another disc. ● Refer to "Beware of condensation" and remove the condensation by evaporation. →65
Sound is not produced.	● The disc has not been placed. ● The player is not put to the play mode. ● The disc is extremely dirty. ● The disc is scratched. ● The connection cords are not inserted securely.	● Place a disc in the CD player. ● Press the ▶/II key. ● Clean the disc referring to "Disc handling precautions". →66 ● Try another disc. ● Connect securely.
Sound skips.	● The disc is dirty. ● The disc is scratched. ● The player is subject to vibration.	● Clean the disc referring to "Disc handling precautions". →66 ● Try another disc. ● Install the unit in a place not subject to vibrations.

Remote control unit

Symptom	Cause	Remedy
Remote control operation is not possible.	● Batteries are exhausted. ● The remote control is too far away from the system, the controlling angle is deviated or there is an obstacle in between. ● There is no tape or CD set in the component to be played. ● An attempt is made to play the cassette deck which is recording something.	● Replace with new batteries. →18 ● Operate the unit inside the remote controllable range. →18 ● Set a tape or CD in the component to be played. ● Wait until the recording ends.

Notes

1. With some tapes, a squeaky noise is produced when the tape is stopped automatically. This is due to the tape protection, and not a malfunction.
2. Do not use 120-minute tapes, for the tape is too thin and gets easily tangled.
3. Do not use contact cleaners because it could cause a malfunction. Be specially careful not to use contact cleaners containing oil, for they may deform the plastic component.

Specifications (For U.K. and Europe)

Cassette receiver (RX-49) M-49/M-49M

Amplifier section

Rated power output

STEREO MODE

..... 68 W + 68 W DIN (1 kHz, 0.7 %, 8 Ω)

..... 75 W + 75 W RMS (1 kHz, 5 %, 8 Ω)

SURROUND MODE

CENTER ..... 22 W RMS (1 kHz, 10 %, 8 Ω)

REAR ..... 6 W + 6 W RMS (1 kHz, 10 %, 8 Ω)

Signal to noise ratio

PHONO ..... 72 dB (IHF'66)

LINE ..... 83 dB (IHF'66)

(VIDEO / MD, AV AUX)

Input sensitivity / Impedance

LINE (VIDEO / MD, AV AUX) ..... 150 mV / 47 kΩ

MIC ..... 1.5 mV / 47 kΩ

PHONO ..... 2.5 mV / 47 kΩ

Output level / Impedance

SUPER WOOFER PRE OUT ..... 2.0 V / 1 kΩ

Video section

Input level / Impedance

VIDEO (composite) ..... 1 Vp-p / 75 Ω

Input (VIDEO, AV AUX)

Output level / Impedance

VIDEO (composite) ..... 1 Vp-p / 75 Ω

Output (MONITOR, VIDEO)

FM Tuner section

Tuning frequency range ..... 87.5 MHz ~ 108 MHz

Usable sensitivity (DIN at 75 Ω)

MONO ..... 1.2 µV / 13.2 dBf

MW Tuner section

Tuning frequency range ..... 531 kHz ~ 1,602 kHz

Usable sensitivity ..... 12 µV / (500 µV / m)

LW Tuner section (U.K. only)

Tuning frequency range ..... 153 kHz ~ 279 kHz

Usable sensitivity ..... 22 µV

Cassette receiver (RX-29) M-29/M-29M

Amplifier section

Rated power output

..... 66 W + 66 W DIN (1 kHz, 0.7 %, 8 Ω)

..... 75 W + 75 W RMS (1 kHz, 5 %, 8 Ω)

Signal to noise ratio

PHONO ..... 72 dB (IHF'66)

LINE ..... 83 dB (IHF'66)

(MD, AUX)

Input sensitivity / Impedance

LINE (MD, AUX) ..... 150 mV / 47 kΩ

MIC ..... 1.5 mV / 47 kΩ

PHONO ..... 2.5 mV / 47 kΩ

Output level / Impedance

SUPER WOOFER PRE OUT ..... 2.0 V / 1 kΩ

FM Tuner section

Tuning frequency range ..... 87.5 MHz ~ 108 MHz

Usable sensitivity (DIN at 75 Ω)

MONO ..... 1.2 µV / 13.2 dBf

MW Tuner section

Tuning frequency range ..... 531 kHz ~ 1,602 kHz

Usable sensitivity ..... 12 µV / (500 µV / m)

LW Tuner section (U.K. only)

Tuning frequency range ..... 153 kHz ~ 279 kHz

Usable sensitivity ..... 22 µV

Note KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

For the U.S.A.

Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

For the U.S.A.

CAUTION:

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

KENWOOD CORPORATION
2967-3, ISHIKAWA-CHO,
HACHIOJI-SHI,
TOKYO, JAPAN

KENWOOD CORP. CERTIFIES THIS EQUIPMENT CONFORMS TO DHHS REGULATIONS NO. 21 CFR 1040. 10, CHAPTER I, SUBCHAPTER J.

Location: Back Panel

Specifications *(other countries)*

Cassette receiver (RX-49) M-49 / M-49M

Amplifier section

Rated power output
STEREO MODE
..... 80 W + 80 W (1 kHz, 10 %, 8 Ω)
SURROUND MODE
CENTER ..... 22 W (1 kHz, 10 %, 8 Ω)
REAR ..... 6 W + 6 W (1 kHz, 10 %, 8 Ω)
Signal to noise ratio
PHONO ..... 72 dB (IHF'66)
LINE ..... 83 dB (IHF'66)
(VIDEO / MD, AV AUX)
Input sensitivity / Impedance
LINE (VIDEO / MD, AV AUX) ..... 150 mV / 47 kΩ
MIC ..... 1.5 mV / 47 kΩ
PHONO ..... 2.5 mV / 47 kΩ
Output level / Impedance
SUPER WOOFER PRE OUT ..... 2.0 V / 1 kΩ

Video section

Input level / Impedance
VIDEO (composite) ..... 1 Vp-p / 75 Ω
Input (VIDEO, AV AUX)
Output level / Impedance
VIDEO (composite) ..... 1 Vp-p / 75 Ω
Output (MONITOR, VIDEO)

FM Tuner section

Tuning frequency range ..... 87.5 MHz ~ 108 MHz
Usable sensitivity (MONO at 75 Ω) ..... 1.2 µV / 13.2 dBf

AM Tuner section

Tuning frequency range
9 kHz step ..... 531 kHz ~ 1,602 kHz
10 kHz step ..... 530 kHz ~ 1,610 kHz
Usable sensitivity ..... 12 µV / (500 µV / m)

Cassette receiver (RX-29) M-29 / M-29M

Amplifier section

Rated power output
..... 80 W + 80 W (1 kHz, 10 %, 8 Ω)
Signal to noise ratio
PHONO ..... 72 dB (IHF'66)
LINE ..... 83 dB (IHF'66)
(MD, AUX)
Input sensitivity / Impedance
LINE (MD, AUX) ..... 150 mV / 47 kΩ
MIC ..... 1.5 mV / 47 kΩ
PHONO ..... 2.5 mV / 47 kΩ
Output level / Impedance
SUPER WOOFER PRE OUT ..... 2.0 V / 1 kΩ

FM Tuner section

Tuning frequency range ..... 87.5 MHz ~ 108 MHz
Usable sensitivity (MONO at 75 Ω) ..... 1.2 µV / 13.2 dBf

AM Tuner section

Tuning frequency range
9 kHz step ..... 531 kHz ~ 1,602 kHz
10 kHz step ..... 530 kHz ~ 1,610 kHz
Usable sensitivity ..... 12 µV / (500 µV / m)

Note

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Specifications

Cassette deck section (M-49 / M-49M / M-29 / M-29M)

Track ..... 4-track, 2-channel stereo
Recording system ..... AC bias system (Frequency: 105 kHz)

Heads
- A deck — Playback head 1
- B deck — Playback / recording head 1
- Erasing head 1

Motors 1
Fast winding time ..... Approx. 120 seconds (C-60 tape)

[General] RX-49 (M-49 / M-49M)
Power consumption ..... 170 W
Dimensions ..... W: 360 mm (14-3 / 16")
H : 319 mm (12-9 / 16")
D : 313 mm (12-5 / 16")
Weight (net) ..... 9.2 kg (20.2 lb)

[General] RX-29 (M-29 / M-29M)
Power consumption ..... 170 W
Dimensions ..... W: 360 mm (14-3 / 16")
H : 319 mm (12-9 / 16")
D : 313 mm (12-5 / 16")
Weight (net) ..... 8.4 kg (18.5 lb)

CD player unit (DP-29) M-49 / M-29

Laser ..... Semiconductor laser
Playing rotation ..... 200 rpm ~ 500 rpm (CLV)
Wow & Flutter ..... Unmeasurable Limit

[General]
Dimensions ..... W: 360 mm (14-3 / 16")
H : 109 mm (4-5 / 16")
D : 320 mm (12-5 / 8")
Weight (net) ..... 2.7 kg (5.9 lb)

CD player unit (DP-R49) M-49M / M-29M

Laser ..... Semiconductor laser
Playing rotation ..... 200 rpm ~ 500 rpm (CLV)
Wow & Flutter ..... Unmeasurable Limit

[General]
Dimensions ..... W: 360 mm (14-3 / 16")
H : 109 mm (4-5 / 16")
D : 415 mm (16-5 / 16")
Weight (net) ..... 4.0 kg (8.8 lb)

Note — KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

For the U.S.A.

FCC WARNING

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment may cause harmful interference to radio communications, if it is not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio / TV technician for help.